

EDUCATIONAL PROBLEMS

VOLUME I

By

G. STANLEY HALL

Recreations of a Psychologist

Morale

Adolescence

Youth

Educational Problems

**Founders of Modern
Psychology**

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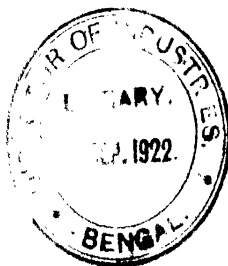
EDUCATIONAL PROBLEMS

BY

G. STANLEY HALL, Ph.D., LL.D.

PRESIDENT OF CLARK UNIVERSITY AND PROFESSOR OF
PSYCHOLOGY AND PEDAGOGY

VOLUME I



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INTRODUCTION

IN looking over the past twenty-five years, it seems hardly too much to say that educational thought has broadened more in the past five, and certainly ten, years than in the twenty that preceded. At the beginning of the period the schools were stagnant, the teachers complacent, and the work formal and mechanical. The great movement started by Horace Mann had spent its force. Pedagogy was despised in academic circles (the word suggesting pettifoggery to one born in an *Atlantic Monthly* contribution). Child study was unknown. Psychology of all kinds had no recognition. The philosophy of education consisted chiefly of a few sonorous metaphysical platitudes which mystified far more than they enlightened. Those who brought lessons from abroad were told that American schools must be kept American, and their voice was almost like that of those who cry in the wilderness. Superintendent Philbrick publicly challenged all comers to find any essential imperfection in the schools of Boston, and State Superintendent Dickinson had a philosophy that was remarkably complete, defining everything needful in four blackboards full, on which every large question which teachers had a right to ask was answered by carefully worded formula. Dr. W. T. Harris was rapidly acquiring the almost papal authority which he later wielded among the leaders, now the "old guard." Educational journals of that period were timid, provincial, and are now utterly unreadable. The N. E. A. under the Bicknell régime was being very rapidly pushed to its later prominence as a pedagogic sanhedrin. The term "and pedagogy" appended to my title as Professor of Psychology at the Johns Hopkins in 1884 was, I think, the second in the country, Professor Payne, of Michigan, preceding, to be attached to any chair in any considerable

college or university, and was regarded by nearly all my friends as a handicap. President Eliot's introduction of my first Boston course (Chapter XIV, Vol. II, page 241) was very typical of the attitude even of those who were advanced. I still have a letter from a president of a now leading state university canceling my appointment on his faculty upon my return from Germany, because he deemed it unsafe to discuss the fundamental principles of education upon which our system was based, as he thought I would do it, because this would be "unsettling." Another leading orthodox Eastern college president declared that he did not propose to send his philosophy, theology, religion, or basal educational convictions to any psychological laboratory or any psychologist to be tested. But I forbear (for it would be almost cruel to those still living, some of whom have changed for the better, doubtless, more than I have) to cite further from my memoranda of these early days. It was a kind of warfare for years, sometimes merry, sometimes in earnest, with scars which veterans on the winning side may be pardoned for feeling some pride in showing, but had now better ignore and forget, so altered is everything. Educational domains, once denied, then ridiculed, are now represented by experts devoting all their time to each in many of our leading universities. Such topics are school hygiene, the history of education, industrial training of many kinds, plays and playgrounds, subnormality, religious and moral education, art. Meanwhile, our conception of education has broadened far beyond the confines of the school and we are realizing that it is as wide as life itself and that the highest standpoint from which any human institution can be judged is a pedagogic or pragmatic one. Child study, once ridiculed and despised, has spread to every highly civilized land and is represented by academic chairs and journals galore and has become the chief stone of the corner. Instead of the child being for the sake of the school, we have had a Copernican revolution, and now the school, including its buildings, all its matter and method, revolve about the child, whose nature and needs supply the norm for everything. Those who know what has been done in this domain already speak with an authority which is recognized as is no other.

Yet, despite all this progress, our school system is yet in

the gristle, and comparatively little of its history can be written yet because the best of it has not yet been made. Education is still rutty, mechanical, and the system is, on the whole, poorly served by those who teach, admirable as the best are. Our schools are financially poorly supported, despite the \$300,000,000 spent a year, and need and must have a far larger budget. So, too, notwithstanding its rapid growth, our school system has not yet transcended the tadpole stage, and the next twenty-five years ought to—and I am optimist enough to believe they will—show vastly accelerated progress, so that the transformations of the past quarter of a century will appear small beside those of the next quarter, and the *per capita* sum spent upon each child will be greatly augmented. There will be improvement in the professional standing of teachers, in their character, ability, and training, and many transformations, very likely radical, which it is impossible to forecast, are sure to occur. The many and grave faults that now limit the usefulness and threaten the future of our system must be removed at whatever cost, for our stability, progress, and standing among the nations of the world, which are now gravely imperiled. Our destiny is at stake. Thus, America to-day needs a new educational dispensation. Our system is not fulfilling the purpose for which our fathers established it, nor is it molding men as it did in older days when it was simpler and cheaper, and in these volumes I have tried to point out in some detail, as best I could, why, as well as to suggest the needed cures as I see them.

Let us look at the two extremes of *good* and *bad* and then ask which we are nearest. I. *Ideal* teaching focuses in suggestion. The more interest on the child's part, the nearer the nascent period for the topic, the more genius and ability, the lighter may the suggestion be and the less method is necessary to touch off the innate springs, the less repetition is necessary and the more sure and permanent the acquisition. Such teaching at the right psychological moment is, like a hint to the wise, sufficient. Biographies and religion abound with instances where a chance word or event, or perhaps the unconscious influence of a single teacher or acquaintance, has changed the whole current of life. This is the right

seed upon good soil, fittest if sown in its proper season. Moreover, in every normal child at about every moment of its life there is some zest or curiosity just ripe for impregnation with information and suggestion, which will be instantly and forever assimilated with no need of explanation or review, which, indeed, these would positively injure, because they would interfere with the complete absorption of knowledge and keep it nearer the memory surfaces. The pedagogic world knows little of what might, could, and should happen if a child's soul were thus constantly fructified by the most and the best that an ever-present mentor, charged with love and knowledge and sagely observant of times and seasons in making the most of every opportunity, could do. This is the ideal education, and though it may never be fully realized, it should be ever kept in mind and constantly approximated. The school is to shorten the stages by which the child repeats the history of the race. Perhaps none of these essential stages should be entirely omitted for the fullest and most humanistic culture. Some of them need to reverberate only faintly and but once to do their great work of stimulus. Some need to be touched only in the lightest way. Often even the germs of the sins and errors of all the past must be made to glow up for a moment, for the vestiges of evil are thus burned out, while at the same time their conflagration alone can arouse the next highest powers which control or, it may be, repress them. Others need to be betoned with emphasis lest something vital, that is part of man's precious legacy from his immemorial past, be lost to life, for the best in us is often only the worst sublimated and transfigured.

II. On the other hand, in an organized system of education we have, of course, to depart point by point from this ideal, so that we cannot afford to forget that by an iron law, like that of gravity itself, schools constantly tend to approximate the *worst*. What is this? Apathetic, unwilling pupils, coerced to attend; topics which invoke no alluring interest in the soul and so constantly tend to lapse without incessant repetition and mechanical drill; themes taught out of season and those where method ever tends to predominate over matter and content; everything out of its proper age, either too early or late or at the wrong season of the year or time of day; sex

differences ignored; individuality obliterated in the monotonous mass, and the law of average made supreme; skill and knowledge stressed that have no value for later life and will be lost when school is over; prim, formal conventional virtues put in place of essential personal morality; no attention paid to that function of life which is at the dawn of puberty the most dominant of all interests, hungriest for information and capable of assimilating condensed extracts of more that is needful for right conduct in life than any other function of human nature, little or nothing helpful in bread winning, which is the first duty of man, conditioning his value in modern life; incessant recitation and examination because the teacher, with only too much justice, feels that without them everything gained may slip away forever because it strikes no root; the soul-breaking drudgery of marking, because so little is known of the real life and powers of the child that each one has to be judged merely by this factitious and superficial test; so that hosts of children are robbed of their inalienable right to be in that grade and class where they can get most and are sentenced to the treadmill of repeating a subject half or sixty or seventy per cent known already; no time or agency to find the individual *proprium* of each child, on the detection of and emphasis on which it will depend whether or not he ever does anything worth while, especially if he has, as most do have, capacities above the average in some direction; just half those who should be in the system, out of it, day by day; school keeping half the week days in the year; poorly paid and trained teachers, longing and ready to do better on the first chance and leaving so fast that some fifth of our educational army is every year composed of raw recruits; shoals of foreigners landing on our shores each year whose children have to be taught the very elementary things of life in this country; school boards, the members of which are, on the whole, not more than half competent, and with more interest in their own personal ambitions than in the duty of public service; women, because their services can be procured for a less fee, where men should be; teaching largely reduced to lesson setting and hearing; text-books all-dominant, usurping the place of personal inculcation; occasional corruption; wastefulness; unfit teachers kept in their places by un-

worthy influences; uniformity of goal; laws by the score enacted each year, but many of them unenforced and unenforceable; a censorship placed on all within the system who may be moved to speak out their minds and point out defects, and grandiose eulogies of the system on all public occasions by those who may be and are responsible for it; juvenile crime and vice abounding; bad eyes, teeth, and health generally, increasing up the grades; everything slack and at low pressure; the home abandoning its functions to the school, which latter excuses itself by charging its own defects and shortcomings back upon the home; the church and all religious influences banished from the school, because, forsooth, its representatives cannot agree on what is best and this is therefore the easiest way; moral and industrial education, the two chief problems and needs to-day throughout the educational world, regarded as fads and frills; innovations suspected; nearly all I have described in the last chapter on Civics ignored; a persistent fringe of illiteracy, children leaving, on the average, at the end of the sixth when the bill of fare provides twelve courses—this is the nadir.

Somewhere between these extremes, all great systems of national education hover. None realizes all the worst nor all the best agencies. Which are we nearest and toward which are we mainly tending? This is the vital, heart-searching question which is always in order, and perhaps never so much so as now. One thing is certain, however, that those within the system neither dare nor are they competent to judge it. Few of the outside criticisms, lately so numerous, have that degree of expertness which makes their voice authoritative. College presidents and professors, a few of whom might pronounce upon it, often have their own interests, the one in increasing the number of students for their institutions, and the other the advancing of their own text-books. They can never look at the system from without and with entire impartiality. They usually know only parts of it, especially the high schools. Thus, these doctors, to whom our patients would most naturally turn, are not properly trained to diagnose and prescribe, but are very prone to be suffering more or less from the same distempers while thinking themselves well, and thus do not rightly evaluate essential symptoms.

Again, we are so rankly prosperous as a nation, so satisfied, have been so successful that we trust in the principle of *laissez faire* implicitly. Providence or nature will take care of America, and whatever betides, all will come out right in the end and bread will fall from somewhere into every open and hungry mouth, and so it usually does. The American generally gets a living and gets on in this great land of opportunity without needing to figure too closely. If the school is wasteful, so are homes, railroads, business methods, Congress, and the rest—and we can afford it. If the schools do not teach the right thing in the right way, the children generally survive the loss and the tide of foreign immigrants gets assimilated somehow. Poorer nations may practice small educational economies, but we have no more pressing need of the conservation of humanity which drifts to us from all the earth than of forests and other natural resources. All this compels us to the conclusion that we cannot expect any radical reforms or reconstructions of our educational, without reform and reconstruction of our social, system, of which the school is essentially typical.

Despite complaints of many sorts, just and unjust and from many sources, wise and otherwise, and despite the laudation of our system from top to bottom by its representatives and also by well-disposed and personally conducted foreign visitors, it has never yet had the benefit of much of any true criticism which was at the same time competent and impartial. This it profoundly needs, and never so much so as now, for never since its beginning has the public school been so inadequate to our needs, since, much as the latter has grown and improved, the demands which have to be made upon education have increased far more rapidly. The average American citizen in embryo leaves school at the sixth grade, having had instruction only by poorly trained and underpaid women. He has had practically no training toward self-support, knows little or nothing of personal hygiene, which is the religion of the body, or of civics, which is the religion of citizenship, or of sex, which with the increasingly urban life is a source of more and greater dangers than ever before. Our young people are turned out into life just before the dawn of pubescence, most ignorant and most exposed. If the child has any re-

ligion, it has come to him from outside the school. What is more vital than these things? School methods, texts and topics are traditional and teaching is slack and easy-going. The high school, and often the college, is mechanical, complacent, and mediocrity of both is protected and kept in countenance by their respectability. The true university is only half developed and the administrative and financial methods of our old endowed institutions, if not "rotten," as the head of one of our largest and oldest universities has lately called them, are in crying need of radical revision, as I had intended to show, point by point, in chapters on the college, the university, the technical, medical, theological, and law schools, which are excluded from this volume by limitations of space, but which will appear later. Thus our whole system is in crying need of thoroughgoing inspection and overhauling by experts, such as commercial, manufacturing, and other concerns are now everywhere employing, to point out how waste-age can be avoided and greater efficiency secured. This work, boards that control both educational systems and institutions will, I am convinced, soon bring to pass. We need nothing less than a great educational revival all along the line, and I believe it has already begun and that a greater transformation than we have ever had, impends. Thus I am not pessimistic, for we have gained of late at a pace which, up to date, is constantly accelerating.

I wish, therefore, that I dared to entitle this book *The Pedagogy of the Future*. Every one of the new departures indicated in the following chapters has, I believe, without exception, already been somewhere put in successful operation, and the first duty of the present is to broaden our comparative viewpoint until it has an international, if not world-wide, range and put into practice all the best that has been anywhere found to work well. But this is not all, for, before it is completely done, many new problems and possibilities now unglimped will be seen. Hence, the complete pedagogy of the future, when it comes, will be larger than it has yet entered into the heart of any man to conceive. Thus, the present situation should appeal to the best young men as education has never before appealed. All the four or five score of child-welfare agencies must and will be correlated with the

school and directed from one central bureau, so that each child can be placed just where in the whole system it will get the most good. Each, too, will not only be inspected medically and morally, but studied for vocational aptitudes. If the reforms that are now possible, or even those that now seem imminent, are really effected, these volumes, instead of being the pedagogy of the future, will ere long become that of the past. That they may soon become so is my most earnest hope.

For twenty-five years I have lectured Saturday mornings to teachers and to students upon Education, and this book is the final revision of parts of this course up to date, ending February, 1911. The result is not unlike Uncle Tobey's coat, made over and over, part by part, with not only new fabrics, but new fashions, so that nothing to suggest the original remains. During these years I find that I have given over seven hundred outside addresses on educational subjects, to all kinds of audiences, and written several score of magazine articles and have drawn freely upon all this material, although the chapters as they here stand have been newly written and recast within the last ten months, with the printer at my heels, so that I have not been able to observe the obviously proper order of chapters.

Besides my constant indebtedness to the Librarian of Clark University, Dr. Louis N. Wilson, who has helped me to find and procured from a distance many references, I am under special obligation to Dr. Theodate L. Smith, who has critically read all the manuscript as well as the proof of the second volume and suggested various improvements and additions. I am also under unusual obligations to Miss Helen Cashman, who has typographed, read, and revised a large part of the manuscript and proof and prepared the authors' index; also to my pupils in Education for the use of their printed, and occasionally unprinted, theses, of which I have often made free use.

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EDUCATIONAL PROBLEMS

CHAPTER I

THE PEDAGOGY OF THE KINDERGARTEN

The ideal kindergarten—Its value as a school for educating young women
—Need of enlarging the scope of training schools—Froebel as a seer
anticipating modern ideals—Froebel's defects—Lack of competent
criticism—Need and lack of child study for the kindergarten age—
Violations of Froebel's spirit in the modern kindergarten—Some
specific reforms needed—Need of transcending Froebelian limitations
—Burk's experiments with free play—Miss Blow's criticism of Miss
Dopp, Dewey, and Hall—The kindergarten in Europe—Relations to
the day nursery—The progressive and conservative schools.

THE more advanced the student and the more specialized the teaching the less pedagogy and genetic educational philosophy figure. In higher mathematics, astronomy, philology and the rest, the method is the logic of the science itself; and the arts of adaptation to ages and individuals play a small rôle. But, as we go down the scale of age or of intelligence, and as the interval between the knowledge and mental development of the teacher on the one hand and the taught on the other increases, the proportion of method to subject matter also increases. In teaching infants and still more in educating idiots and animals, as is now often done in the laboratory, we must not only elementarize the subject but know and gauge the capacities of those we teach. Thus the younger the pupils the more we must study them to adjust; and the more general the culture to be imparted, the more we need to know and utilize the laws of the deepest philosophy of life. When this latter is entirely undeveloped, we must fall back on instinct and intuition, vague and ambiguous though their deliverances may be. To guide ourselves in the development of the very earliest stages of infancy, we can thus do little but stand aside out of Nature's way, and follow the promptings of parental

love, or at best muse, brood, and consult the inner oracle of affection for the direction of our care-taking. These considerations, pertinent at every stage of education and history, where pedagogical theory and practice have advanced down the age scale toward the nursery, and even into it, are nowhere so necessary as in considering Froebel, whose nebulous speculations were bred by the *Zeitgeist* in the natal age of German philosophy, and also by the great idealistic movement which accompanied the birth of this puissant nation. His weird and bizarre version of this metaphysical ferment was a unique "culture bouillon" concocted of various ingredients: theosophic mysticism, foregleams of evolution, passionate enthusiasm for nature just as the great scientific movement was dawning, and love of children based largely upon self-pity for the pathos of his own childhood, a motive that has prompted so many of the great founders of educational institutions to provide opportunities for subsequent generations to emancipate themselves from the ignorance that had handicapped their own lives. Perhaps these very defects have made Froebel's "Education of Man," which to adepts in the psychological disciplines has always seemed a nondescript medley and conflation of unorganized *aperçus* (a really unreadable book with seven seals, though it is), one of the best and most nourishing of all infant foods for novices in the speculative field, a book which will and should always be dear to women's souls, not so much for what it teaches their intellect, as because it makes them feel so profoundly the burden of the mystery of the nascent soul, the greatest miracle of life, and the sanctity of the offices of ministration to it, and shows that this insight and function are central and cardinal in the universe.¹

I.—The very term "Kindergarten" is multifariously suggestive and its every possible meaning is charming. Froebel may well have cried "Eureka" when, after long quest for a fit name, he hit upon this, for it is an apt symbol of his type of mind as well as of the pedagogic endeavor of his life. It may signify a garden for, or a park of, children, themselves regarded as the consummate flowers of nature; or even as a

¹ See the interesting Chapter VIII on Froebel, in Dr. T. Misawa's *Modern Educators and their Ideals*, D. Appleton & Co., N. Y., 1909.

paradise not to be the scene not of the creation of the first mature human pair, but the ideal setting or larger nest for children to be born and grow in. Flowers and trees are vastly older than mankind and have been worshiped at a certain stage by probably every race, of which they were perhaps the first educational environment, idealized always afterwards in folklore, myth, and song. Once every flower was a symbol or oracle, and plants bore the signatures of planets and spoke a language of their own to the heart, while the trees, the abodes of men's ancient forebears, meant shelter or aspiration, ways leading up to the abodes of the gods. Groves, as man's first temples, where Druids felt most strongly the *sensus numinis* haunted by Dryads and herbs that sustained life before the dawn of agriculture, which marked the first settled *modus vivendi* of the race and also the rise of human dominion over vegetal life, suggest precisely the Arcadia where alone childhood is really at home or in its world. Again, a garden is both useful and ornamental and in it nature and nurture, from the time of the very first bower or home, have conspired to do their very best in the botanical, as education should in the animal, kingdom of man; so that it is prophetic of the time when man shall control the evolution of his own species as he has learned to domesticate and improve all the cultivated cereals and shrubs that blossom and bear seed and fruit.

Thus the very word "children-garden" takes us to a region of the soul deep and rankly rich with felted and unanalyzable thoughts, feelings, and impulses, that are very strong but of a very primitive type. It suggests a new setting for childhood, its rescue from an artificial to its pristine state, at a time when fit environment is not only the best background for, but by far the most potent and central of, all the influences of education. Perhaps some time, when the reaction from the present urban and suburban conditions is complete and all schools are in the country (as increasing transportation facilities—trolleys, autos and, perhaps before we know it, flying machines—may make practicable), and when the school-garden movement shall have done its perfect work, our near posterity, if not we, may realize this entrancing ideal of the reunion of the heart of childhood with the heart of nature. One need not be a bucolic poet, a landscape gardener, a horticulturist, or even a

trained agriculturist to revel in imaginings of what a scenic farm school the great all-mother Nature has made possible for the early stages of human life. Would that pedagogues were occasionally inclined to see visions and dream dreams, instead of being as a class the most conservative, prosaic, and plodding, if not just now, under the dominion of modern modes of supervision in this country, the most servile, of all half-skilled laborers. Walks, beds, hothouses, nurseries, lawns, playgrounds, shade, brooks, ponds, fertilizing, seed time and harvest, moisture and drought, grafting, budding, cross-fertilization by insects, the lessons of the soil, play in stone fields and snow and ice, tree setting, with arbor-day functions, cutting and lumbering, sugaring, all the impressive lessons of the processional of the seasons with carefully chosen animal and bird life which means so much to children, learning and being taught on foot and out of doors and from objects, not from words or even pictures—such is Nature's pedagogy. Of nearly every item of her curriculum we rob the child during his most impressionable years when the soul is most plastic to her influences, shut children indoors, teach them in droves for years the attenuated and desiccated three R's, that they may learn to con books and newspapers and, above all, to figure. We pay a terrible price for this education. We often succeed in immunizing the child from experiences natural to his age. We rear him in ignorance of and isolate him from contact with the great influences that have made man man. Thus, with all our precautions, we make wizened souls in wizened bodies by kidnapping the child from his only true and real home which God has decreed and Nature has prepared for him.

Only in its normal environment as above can we study the real child. Here he can live out all that is in him, without the repressions which in the most emancipated child are so many, so dwarfing and often so indescribably pathetic, especially for girls. I am convinced that the civilized world has missed one of the most marvelous and inspiring of all spectacles: viz., the normal young child growing psychically all it is capable of growing, from within out, by leaps and bounds. This even the growth curve of the brain suggests as normal were the child only rightly circumstanced. Our bepedagogued world has little conception of what education can be and do. In his

concept of nature as the child's nurse, mother, and teacher, even Rousseau was a pallid and shut-in convalescent, just beginning wistfully to dream and think out of doors. Oh, for one really ideal kindergarten in the world to demonstrate all this to carping and incredulous pedagogues with their distorted and mean ideas of children, and their dense ignorance of their deeper nature and their possibilities! It would cost much money; but how can the wealth and service in the world be better spent than in restoring children to Nature and opening wide rather than shutting the doors of opportunity and incentive for observation, language, self-activity, all-sided interest, true race recapitulation, hygiene, the preformation of the soul for virtue, religion, social and industrial efficiency—all of which languish in the four walls of the schoolroom where children are caged like wild animals in captivity, until the gamey flavor of the open and the call of the wild within them, and their most inalienable rights to Nature are lost.

Little of all this was ever formulated in Froebel's mind; but reverberations in this direction were always felt in his heart, animating and inspiring him. Far as he fell below such an idea at every point, nevertheless it quickened his work from start to finish. He wrought only with country children, and never dreamed of the wholesale transportation of his system to the city, from the poor to the rich; the limitation of it to two or three hours for at most five days a week; the academization of his theories in university chairs, or the overspecialization to which child care has been subjected so that today the kindergarten is only one of some forty other types of child-welfare institutions as we classify them here; nor did he dream of the development of an intolerant Froebelian orthodoxy, suspicious of the new departures and innovations that are so indispensable for progress, or the development of conservative and radical parties, or the isolation of his methods in infant grades so that he has influenced no other stages or kinds of education and there is an often abrupt break between them and the earliest school classes.

II.—Turning now from children to teachers, we confront another great ideal that Froebel far more faintly glimpsed. In our Western civilization, a large and growing proportion of young women who have reached an age where Nature in-

tended them to be mothers, are by circumstance or by their own choice unwed and childless. Ehrenfels, in several recent publications, has attracted great attention in Germany by urging that China and Japan will eventually surpass and overcome the Western nations because, in the former, practically every woman of fertile age is actually bearing children, while in the latter a large proportion of women, during their whole, and especially during the best earlier years of their maturity, are exempted from motherhood, as well as because in the West more wives are barren than in the East, and more who perform the maternal function do so imperfectly. If now we survey the occupations of the vast army of American young women, who are not contributing to the population, but who are in shops, as well as office girls, teachers, and the long list of those in wage-earning vocations open to young women—we find that few, if any of these occupations, unless that of nurse, are better calculated to keep alive and develop more of the potentialities of motherhood or to vicariate for its functions than the kindergarten can and should do. Few occupations in which women engage unfit less for family life or involve less change of spirit and ideals if marriage comes. The very contact with young children, if not mechanized as in the grades, tends to keep women cheery, fresh, young, original, and healthful in soul and body. If society makes ladies, the college, scholars, the industries, managers or higher servants, the kindergarten makes women and gives those who would and should become mothers one of the very best substitutes for this function and preserves the best there is in young or even in aging maidenhood.

This by no means implies that existing kindergarten training schools provide this optimal preparation or succedaneum, as some of them advertise to do, for their courses are often formal, intellectual, and of late frequently too academic. Oversophistication here may actually enfeeble or pervert the maternal instinct; and there is a type of scholastic old-maidishness that is positively dangerous for young maidenhood in the glory of its first maturity, the touch of which tends to wither and breed distrust of the best things in the soul, because it generates repression, prim proprieties, and self-consciousness rather than all-sided expansion and expression. Thus with its large and

growing army of acolytes, the kindergarten should now seek as a function, second only to doing the most and best for young children, to do the most and best for young women in training and in the ranks. Thus a new and not yet adequately recognized duty is now laid upon us—to provide maiden probationaries for motherhood, with such ideal environment and occupations as will make them true mothers in heart and soul because lovers and servers of children. Between the soul of the child from three to six and the soul of the young woman in the middle and later twenties and the early thirties, there is a strong, native *rapprochment*, deeper than anything education can supply. Each responds to the other in a way that even genetic psychology is only just learning to appreciate. This interval of age remains a constant one of maximal efficiency as woman and child advance in years. Just as babies keep even an aging mother young in soul, so kindergartners are kept juvenile in mind and no doubt also in body by daily, homey converse with children. This age correlation and the rejuvenation caused by life with childhood are now looming up as great themes, which but for our limits in space should have fuller treatment here.

Many now tell us that just the physical handling of children at this age when they still need considerable manipulation is far more essential than we are wont to think for their best development. But here, too, there is a correlative advantage, and the kindergartner should, for her own good, care much for the bodily needs of her charges. She should not merely direct gifts and occupations, tell stories and lead games and songs, but at least occasionally wash, comb, dress, feed, and otherwise stand as completely as possible in the mother's place, use her hands upon the child in every helpful way and have a pragmatic interest in shoes, stockings, cap, hat, food, drink, buttons, etc.; be and do sometimes all that a nurse can be and do; recognize that the child's bodily needs are as great as perhaps and paramount in importance to, the needs of its soul, so that often those that do most for the physical do most for the psychic and the moral. Without this her very love for the child is incomplete, as are her ministrations; and there is loss both to her and to the child. With the nursery age and needs, there must be nursery functions. How can a woman possibly love and serve a

young child whose body she does not know and animate to in every intimate and necessary way? If she regards this as degrading, and aspires to be a mentor to the soul only, she is dematernalizing her own soul to some extent and orphanizing the child and impairing its psycho-physic unity. Thus nothing affecting the welfare of the child at this age should be foreign to her interests or helpfulness.

Now combine this concept of the teacher with that of the outdoor functions suggested above, and we shall realize that the ideal kindergartner should introduce the child to Nature and social life. She must know something of the lore of beasts, birds, flowers, and trees. Her Nature should be breezy with out of doors, and bring the spirit of Nature in and take the child to it. The ideal test of her work would be what she could do with a band of children in such an environment as I described above or in a day spent in rambles over and gambols through gardens and groves, by water, amidst the fall of leaves, or among the most edifying flora and fauna. The ideal kindergartner should know and feel and love Nature and stand in heart-to-heart relations with her, and be able to expose the child to all of the influences to which it is susceptible. This should be first and foremost and the more special indoor work should be developed on this basis. She should seek health in all its new loftier meanings and strive to reproduce and keep alive in herself the first fresh thoughts and experiences of the race, and impart them to the children in their most receptive periods.

Thus, I would greatly enlarge the scope of nature study in kindergarten training schools. Our forebears for countless ages knew no other teacher than Nature, and to all the notes and harmonies in her magnificent symphony, the soul is attuned in childhood, and if the chords are not smitten betimes, there is grave loss. I would not entirely exclude the gifts and occupations, but they should be once for all completely subordinated and relegated to a very small place in the kindergarten as compared to nature work. The latter should be of a unique and not yet quite adequately appreciated kind. Popular science and the work of the naturalist afield may nourish the kindergartner's soul but, what is more central in her needs, I have attempted elsewhere to describe (cf. my *Adolescence*, chapter

III. Adolescent Feelings Toward Nature and a New Education in Science). The great themes and categories here are: sky, stars, sun, moon, clouds, thunder, water in its various forms—sea and shore, lake and river—wind, fire, insects and their most marvelous instincts, such as cross-fertilization, their modes of producing and rearing their young, etc., plants and animal types and, highest of all, primitive men and children, popularizing results of anthropology. These should be felt and told of, sometimes in a more or less mystic way, so as to stir the ancestral reverberations which bring a regenerative vital touch between the child soul and that of the race, which once and somewhere worshiped all these objects, making them of supreme value and of most vital interest. On such themes and their ramifications in myth and story, the kindergartner should nourish her soul and recognize that, to nothing that vitally stirs her, will the child's soul be unresponsive. Something like this is the religious background out of which all human culture grew, for religion, science, art, and literature came forth out of the heart of Nature. This is the all-conditioning, all-impelling interest that motivates every form of education that is truly vital. This, too, normalizes as well as elevates, broadens, and enriches the emotional life of young womanhood as nothing else can, and keeps sentiment safeguarded against relapse to sentimentality. Just as only the woman's soul knows what flowers really mean, so she is better fitted than man to give the most sound, human response to Nature's primitive teachings, which fit her heart as nothing that our academic curriculum offers can do.

In fine, I would have all kindergartners trained chiefly in this type of nature study, focusing in the study of childhood. We need not entirely exclude the quaint philosophy of Froebel, nor his pedagogical technic; for these, especially the former, are not entirely without value for that ideal education of young womanhood toward which the world is now groping. But, if anything is now plain in this obscure field, it is that Nature must be chiefly stressed as the source of all other intellectual and moral interests. Child-study, as it has now taken form, promises to be the best logical, genetic, and pedagogic focus of all the sciences that deal with life. When we reduce human institutions—home, school, state, church—to their ultimate

raison d'être, we find that their value is always measured by their service in bringing the successive generations to birth and to the highest and best maturity possible. The child is the focus of interest for every kind of social and humanistic study. Thus we reach the dual goal of culture—Nature and the child, or the child fitly set in its paradise. These are the cores of the best education which has or ever can be devised for young women and this, as I believe, conservative kindergarten wise-
acres to the contrary notwithstanding, is, if we interpret his letter by his spirit, precisely “according to Froebel,” who in the practical realization of his ideals fell far below them, as, indeed, most of us do.

III.—Coming now to Froebel himself, I desire to state at the outset that I have read almost every printed word of his, have visited many scores of kindergartens at home and abroad, gave lately a university year of Saturday lectures upon this system, issued a questionnaire concerning points doubtful to my mind which was copiously answered by many of its best representatives, have always had one or more kindergarten conferences at the Clark University Summer School, with one at our Child Welfare Convention in July, 1909, and have gathered and perused quite a literature upon this subject. This it is necessary to premise, because the stock answer of kindergartners, like that of the theosophists, epistemologists, faith curists, Emmanuelists, etc., is that the critics do not understand the system; and if, in what follows, my limitations are painfully apparent, I wish to be credited with at least an honest desire and a real effort to overcome them. Although I see people, whom my egotism leads me to think not very much more gifted or better informed than I, walking with such sure steps where I tremble, doubt, and fear, and saying, as apologists for existing conditions, such transcendently wise and beautiful things that I often cannot understand, I, nevertheless, cannot forbear feeling some slight trepidation lest I am about to expose some grave mental weakness or constitutional deficiency.

Again, let me premise that I believe heart and soul in the kindergarten as I understand it, and insist that I am a true disciple of Froebel, that my orthodoxy is the real doxy which, if Froebel could now come to New York, Chicago, Worcester, or even to Boston, he would approve. His was one of the deep-

est, truest, and most intuitive of minds. His heart was one of the most devoted to be found in the whole history of education. It might also be a watchword of most educational reforms now needed to carry the Froebelian spirit, as its author intended to do, up through all the grades of school work, including even the university. We need to organize a systematic work of rescuing Froebel from the now, or at least till very lately, dominant conservative wing of his American disciples.

Again, so far as my acquaintance and personal impressions go, kindergartners are perhaps, on the whole, if not the most womanly and motherly representatives of their sex to be found in modern society, as I have said they ought to be, at least second to no other class of women in this respect. Some of them come from the best and some from other classes of society, but all are drawn to the work by the truest and highest instincts. There is more love of children, more sympathy with, and more practical knowledge of them in the kindergarten as it exists to-day, than in any other grade of education; and its representatives are eminently lovable and marriageable. No better training for wifehood and domestic life has ever been devised where the ideal is approached. As a rule, those young women who seem by nature distinctly set apart for celibate life, and for the high services of philanthropy now open to women in private and public spheres, are not found here. Parental instincts are the best motive power at this stage, as they should be at all stages, of education. I believe, too, that American kindergartners really want the truth, that they are naturally rather more open-minded than most women teachers of higher grades, and that the presupposition of common sense as a basis of appeal is on the whole a pretty safe one with them.

What, now, are some of the great ideas which the educational world owes in whole or in part to Froebel? I think they may be listed as follows:

1.—He was the first, before even embryology had pointed out the fact, to teach that the child repeats the history of the race, recapitulating its stages. This is now one of the key-notes of genetic psychology, which ought to make it a welcome friend, and not a suspected visitor, in the kindergarten meetings and journals.

2.—Feeling and instinct are the germs of intellect and the

will. Schleiermacher, and later Horwitz, and recently most of the best psychologists and alienists lay great stress upon this primacy of the heart; and just now geneticists everywhere are reaffirming the doctrine that the higher mental powers are evolved out of the larger life of feeling and emotion or affectivity.

3.—Froebel taught self-activity and spontaneity, and that play was one of the great revealers of the direction of inherent interest and capacity. He first saw that if the *play instincts* are turned on as the great motive power in school, far more can be accomplished, and that more easily and with less strain. Man must create; children are by nature abounding in the power of almost divine origination.

4.—He was a passionate monist, a representative of the higher pantheism, God-intoxicated almost like Cleanthes and Spinoza. He was in the true apostolic succession of those great souls whose lives were expanded and directed by a sense that in God we live, move, and have our being. He was the first to apply to education these pantheistic conceptions, which are the culmination of all natural religion, which, however, it need hardly be said are neither necessary for, nor common in, kindergarten work. Whatever we may think of his creed, this inevitably brought with it new standpoints and new methods.

5.—He believed in the original soundness and wholeness of human nature, rather than in Calvinistic ideas of its depravity, and hence abhorred all interfering, or radically reconstructing, methods of education, but thought the latter should be always developmental.

6.—Almost as a corollary of the first statement he exhorted that every child should be at each stage of his life all that that stage called for. He must, as we should put it, use the rudimentary organs of his mind—be a complete animal, if there is a complete animal stage of childhood—as the *conditio sine qua non* of the highest maturity on the human plane later. The future should not dominate; and adult views and standards should not be prematurely enforced. Youth should not scorn boyhood, nor boyhood infancy. The atmosphere should be pervaded with harmony, love, and freedom.

7.—We must all live for and with the children. Indeed,

what else is there in all this world worth living, working, dying for? We adults pass on after we have transmitted the sacred torch of life; and the only test of state, home, church, school, or civilization is whether or not it brings childhood and youth to the fullest possible maturity.

8.—He believed in trusting intuition, and not in the elaborate methodology which whips up the beer of knowledge into a froth, puts form above substance and content, which always analyzes processes, and lets no operation pass without demanding an explanation. The child, he said, is a seed in the ground, which does not see the sun or feel the rain directly, but is not unresponsive to every change of temperature, moisture, or light. "The unconsciousness of a child is rest in God." This saying alone shows that Froebel's standpoint was not inferior to that of Wordsworth in his famous Ode, and that he dimly foresaw the work that has been done lately on that part of the soul which lies below the threshold of consciousness, but from its unfathomable depths rules all our life.

9.—Lastly, I shall mention Froebel's belief in health.¹ The child is a plant, a vegetable, and must, as I said above, live out of doors, or in as nearly out-of-door conditions as possible. He realized that health was the basis and test of all, and was one of the morning stars of the new hygiene.

It has been often asked where Froebel got his philosophical conceptions. We know of his relations to Schelling, Fichte, and especially Krause; and this explains much, but not all or even the best. He was essentially a seer, a mystic, a deep-minded, large-eyed soul-gazer wrestling with great conceptions, half revealed and half concealed by his mode of expression. It is painful to read the Jacob-like wrestlings of his soul with the angel for names, words, and phrases, and how often, after mentally gasping and gagging, and iterating, perhaps tediously—until we almost wish he had taken refuge like other mystics in snatches of some unknown tongue, or, like Jahn, had had recourse to words originally invented—he ex-

¹ I cannot refrain from referring to the comprehensive report on National Vitality, Bulletin of the Committee of One Hundred on National Health, by Irving Fisher, Government Print. Office, July, 1909; and W. H. Allen's *Civics and Health*, Ginn & Co., Boston, 1909, to suggest the present dimensions of this subject.

claims that it is all too deep, and feels that the simplest thing or act cannot be told.

In the German word *saugen* (to suck) he sees *s'augen* (to eye oneself or come to self-knowledge); in *Sinne* (or sense) he sees *s'inne*, with an intimation of reflecting upon oneself. From this aphasic limitation in his power of expression come the many involutions, the tiresome tautologies, the singular absence of humor that might be copiously illustrated, the sense that everything is iridescent with all kinds of symbolic meanings, the obscurities and ambiguities which have baffled or divided his followers, the rhapsodizing "motive," and his disposition, like the pseudo-Dionysius, Boehme, Eckhardt, and other deep, but inarticulate souls, to see everything in anything. He needs editing, with much expurgation of repetitions and judicious explanation of obscurities.

Moreover, he did not entirely escape the limitations of his race, which at that time was eminently unpractical. His early architectural education, his study and curatorship of crystals, his meager mathematical studies, and his manual labor, all tended more or less to give definiteness to his method of mental action; but his training was essentially in inanimate nature. Biology was then quite undeveloped. He was largely color blind; and he did not live to apply his methods to the higher stages of education which know him not. Had his training been in some of the fields of study which deal with practical life, and had he had the advantages of the many lines of work which nowadays would seem to give a better foundation to all his thought, it is difficult to conjecture what the results would have been; but without doubt they would have been very different and better.

Nearly all his disciples have been women, most of them not mothers, but of an age when a certain natural void which only family life can fill, makes itself felt. I believe there is nowhere a philosophy—nothing even that can be made out of Delsartism, mysticism, Browning, or Nietzsche—so fundamentally wholesome and educating for young women at a certain stage as Froebelism. At this age they must idealize, and vicariously, or, by the law of kinetic equivalents, must make, if they do not find, objects for love, enthusiasm, and devotion. Just as childless monks evoked all the beauty and glory of

Marionetry, so I am inclined to think we see the faint beginnings of a Froebelolatry slowly evolving in the heart of this noblest type of American maidenhood. And just as the mental activities favored by monastic life developed scholasticism, so we have in the exiguous symbolism of the fully panoplied Froebelian exegete what Balzac would call a human document no less precious for studying the mental tendencies of celibate life among cultured women. Thus, while Froebel enlarged and glorified womanhood, women have paid the debt by enlarging and glorifying him.

It is singular that Froebel has hardly had a thoroughly scholarly and critical estimate, although I do not forget the many eminent critics who have lately summarized and passed judgment upon him. He has had eulogists and explanations galore; his philosophy has been spun out in many directions by ardent apologists, disciples, and worshipers; but the overwhelming majority not only of kindergartners, but of their leaders, lack university, or even college, training; and the two or three ablest and best trained of his apostles who have attained this plane of culture are holophrastic idealists of his own camp, not trained in modern psychology, and suspicious of it, and disciples of the overcome standpoint of Hegel and his ilk.

Hence it comes that in this country the kindergartners have been till lately an educational sect by themselves. They have talked of kindergarten principles rather than of educational principles; their courses of study have dealt very little with the general history of education; and even the two or three most learned of them have not extended their interests much beyond Schelling, Fichte, and Kant. Of evolution, a type of thought in which Froebel would have reveled with all his soul, they have known little and cared less. The extremely able lady who has so long dominated, with her thought and powerful personality, the entire intellectual field of the American kindergarten, almost like a pope, long intimidated every dissenter, and her nearer disciples sought to suppress, by condemnation and even social ostracism, all those that sought to breathe a freer and larger air; while so overperfect is the organization of kindergartners that this repression was long generally all too effective. Herbart has lately been felt in this country as a very valuable intellectual stimulus, which has greatly broadened and

deepened the best American educational thought; but in a pronouncement a few years since kindergartners were warned by this leader to beware of him and all his ways and works, because, forsooth, his theories of the nature of the ego were not satisfactory to her.

Perhaps the finest kindergarten installation in the world to-day is the magnificent newly built and endowed Pestalozzi-Froebel House, in the outskirts of Berlin, with its ample grounds, individual flower beds, fish ponds, wild wood for birds, and its well-equipped building for a cooking school. For kindergartners going abroad to study, it is altogether the best place. A few years ago I studied it with rare pleasure and edification. But we have been so effectively warned against it because the name of Pestalozzi has been added to that of Froebel, that I found only one American woman there—while in inferior establishments in Germany there were many. At this place the gifts and occupations have been reduced to a minimum, and are gradually being abandoned for better things. Nursing and cooking are included in the training course, and so is the general history of education. At noon the younger children are put to sleep on floor mattresses in the gymnasium; also many other admirable new departures—most necessary, but which, for the most part, are disallowed by the American orthodoxy—have been made.

Again, Froebel was the morning star of the child-study movement, and would have rejoiced to see its day. The school referred to is in the legitimate line of Froebelian descent, at least quite as much as the conservative American school, which looks upon it with so much suspicion. Its ideal is to construct a psychology that shall be really genetic, to introduce evolution into the sphere of mind, and to make everything plastic to the nature and needs of the child. It has till lately received, however, but the faintest recognition from the body of kindergarten teachers, was for a long time generally suspected, and its methods and results were almost unknown in American training schools, although, as we shall see, the newer leaders are changing for the better in this respect.

The most decadent intellectual new departure of the conservative American Froebelists, however, is the emphasis now laid upon the mother plays as the acmé of kindergarten wis-

dom. These are represented by very crude poems, indifferent music, and pictures—the like of which were never seen in any art exhibit—illustrating certain incidents of child life believed to be of fundamental and typical significance. I have read these in German and in English, have strummed the music, and have given a brief course of lectures from the sympathetic standpoint, trying to put all the new wine of meaning I could think of into them. But I am driven to the conclusion that, if they are not positively unwholesome and harmful for the child, and productive of anti-scientific and unphilosophical intellectual habits in the teacher, they should nevertheless be superseded by the far better things now available. I grant freely that they now have a certain advantage of position, because so much meaning has accumulated about them; but the positions were badly chosen, the mental unities are artifacts, and everything has to be radically reconstructed and redistributed as the mind unfolds. The mother plays are related to the more standard parts of Froebel's doctrine somewhat as Comte's later speculations about society—which John Stuart Mill thought were really insane—are related to the sounder, positive dreameries of his earlier years; so that the kindergartners who follow this direction are as far from the legitimate succession as are the Comteists of the Stephen Pearl Andrews type from Lass and Comte's true French line. The mother play *Epigoni* illustrate *in petto* the same tendency we see in the *Peripatetics* after Aristotle, or the later academicians in the decadence of Platonism before it issued in the vagaries of Proclus and Plotinus. It would be easy to devote this article to the apotheosis of symbolism here presented, which deserves a place in Nordau's lectures, on degeneration, and to show how the symbolic mode of thought has been transcended, and how the habit of seeing "everything as a sign to be interpreted" is a vicious one.

Another cardinal error of the conservative kindergarten is the intensity of its devotion to the gifts and occupations. In devising these, Froebel showed much sagacity; but the scheme as it left his own hands was a very inadequate embodiment of his educational ideas, even for his own time. He thought it a perfect grammar of play and an alphabet of industries; and in this opinion he was utterly mistaken. Play and industry were then relatively undeveloped; and while his devices were

no doubt beneficent for the peasant children in the country, whom he taught, they lead, in the interests of the modern city child, a very pallid, unreal life. For the symbolic method that finds everything in everything, any random selections could readily be made the center of an imposing set of explanations.

The great faults of the gifts and occupations, however, are not only that there are hundreds of other things that would do as well; but I am convinced that two or three score could easily be found that possess great natural advantages over most, if not all, of these. Moreover, they deal with inanimate objects and too mathematical conceptions, while this is the age when the child's interest in animals culminates, and when his character is pregnant with moral suggestions as well as with scientific interests. They are also overemphasized; and idolatry of the ball, cube, slats, pricking, peawork, and the rest makes the kindergartner not only indifferent to new departures in the rapid development of recent times, but so suspicious of novelties that new gifts or occupations have to overcome a great presumption against them. The inner connection theory and the scheme of analyzing to a point and then developing from it are fantastic and superficial; and it is persistently forgotten that the meanings seen or claimed exist solely for the teacher and not at all for the child.

Much of the work involves a great waste of teaching, with great effort to inculcate early what will later come naturally and better of itself. The drawing of the kindergarten children thus tends to be wooden; and its introduction into the curriculum is to invert the order of nature, which prompts the child to draw complex scenes with animals and men in motion first, with never a straight line, circle, or mathematical angle until much later. The sins of this introduction of regular mathematical forms against both the artistic sense and power of execution, which can be laid to the door of the kindergarten, are many and great. Moreover, as administered, the occupations tend to overwork the children, to interest them and the parents in the products of the little school factory, and to lay too great stress on sedentary activities and the finer and late developed accessory muscles.

Strange to say, one of the most heinous offenses of the modern kindergarten is against the plain precept of health, in

this age of marvelous renaissance in school hygiene. If a competent trained inspector were to go through the kindergartens of our large cities and report upon what provisions were made against contagious diseases; upon how many children used the same drinking cup, soap, towel; upon the condition and mode of use of toilet rooms; on the percentage of window to floor space; on the provisions for regulating temperature; upon ventilation and drafts; on the hygiene of the nose, ears, teeth, and, above all, of the nerves; upon the matter and manner of lunches; as to what influence the kindergarten sought to exert upon the home diet of children; upon signs of fatigue and the automatisms seen and often developed; on the effects of the preparations for Christmas and New Year's, upon sleep and health generally; upon the amount of room space per child, etc., the results would be shown to be still sadder in the kindergarten than in any other grade of educational work to-day. The lack of official inspection, the convenience and ease of the teacher, the limited means with which many kindergartens are conducted, and, we must add, the relatively too absorbing devotion to speculative theory are responsible for this neglect. The present is, however, witnessing a happy if slow improvement in this respect.

In direct contradiction to all this, Froebel believed the child should live out of doors; would give each child a flower bed that he might have access to Mother Earth; emphasized the need of abundant and healthful activity for the whole body, and understood the hygienic necessities of leisure. We forget that the very definition of school means leisure; that the child must have it in great abundance; and that he must be protected and shielded from the activities of the great world; so that Nature and heredity—an ounce of which is worth tons of education—can get in their work. Quiet, rest, sleep, lethargy, and, above all, daydreaming, are essential; and he must have a strong cause who would interfere with Nature's operations.

The nursery element, now often so abhorred, must be greatly emphasized in our kindergartens. Some factors of the now admirable education of nurses should be introduced by a competent medical instructor in all the training schools. Next to out of doors, the kindergarten, at least in winter, might be on the top floor under a roof wide open to light, where some

of the health provisions of hospitals are seen. Lectures to kindergartners on foods and nutrition, on emergencies, and on other practical matters, instead of on the scholastic metaphysics now in vogue, are most urgently and imperatively demanded for the welfare of the rising generation. I would like to see organized a work of rescue to deliver the modern kindergarten from the metaphysicians, and to give it over to the philosophical hygienists, who should make it everywhere and first of all a place of health.

IV.—The needed reforms in the kindergarten must, of course, come with deliberation enough to be sure. A committee of ten or more might help, provided they were not kindergartners, but were wise and competent; although a badly appointed committee would do harm by confirming old practices. Let me confess frankly that I do not, myself, know at present just what should be done or just how this grade of education should be best organized. One of my dearest wishes is to have adequate means placed at my disposal to experiment a few years, or until I could present a scheme of detailed work. That this could now be done from data that are accessible is certain. Great improvements are entirely practicable.

A few things I shall venture to indicate. The body must be strengthened. The activities should involve more body movements, and the strain upon the hand and eye should be reduced. The very high educational value of dancing should be exploited even more than it is. It cadences the entire soul as almost nothing else. Building should be done with much larger blocks. Catching, throwing, and lifting plays and games should be selected from Mr. Johnson's¹ or some other convenient, repertory. Imitation, or "do-as-I-do" activities should have a larger place. Beanbags, and, if there were room, perhaps the hoop, the jumping-rope, and the kite may have some place.

Certainly the doll, with all its immense educational power, should be carefully introduced. Much might be said in favor of the color top, peg board, soap bubbles, and such old plays as jackstraws and knuckle bones. All the proceedings of the Toy Congress, and the contents of the toy shop, should always

¹ Johnson, G. E.: *Education by Plays and Games*. Ginn & Co., 1907, 234 p.

be studied and used. Sorting out very heterogeneous blocks and cards, and laying like to like, might be tried; while popcorn, play with chalk, shells, spools, pictures—perhaps cut and pasted milkweed pods, potato work, possibly the whip, and all possible contact with animate life should be carefully developed—always remembering that the child's interest in animals culminates before that in flowers or trees, and that the latter reaches its apex before interest in inanimate things. When we reflect for a moment on the richness of the possible symbolism that might be developed out of objects like the above, we realize that the intellectual pabulum, even according to the current Froebel philosophy, would be condensed and enriched rather than otherwise. Each of these things and hundreds of others could train the mind just as well. The curriculum could be just as progressive, and the motor elements of education just as emphatic.

The kindergarten should do much more for language, on the basis of what we now know of child linguistics, not only for the voice in training to speak freely and well, but for the vocabulary. The vernacular never sinks so deep or becomes so vigorous and idiomatic as when most closely linked to activity; but many kindergartens turn out children very imperfectly developed in this respect. One important function in selecting each item of the curriculum should be its language value; for this is the nascent period when, if ever, the foundations are laid for pure idiomatic English. It is important that the teacher's voice be attractive, well modulated, her words well chosen, her English correct, her linguistic resources ample and fertile; but still more important is it that the child should here be taught expression. The overvulable may occasionally need repression; but most children do not talk enough in the kindergarten. Again, wherever practicable, living, foreign languages should be taught in the upper grades of kindergartens by a native teacher, to those children who are likely to study them later in connection with every activity. At five and six the ear and tongue begin their nascent period for other languages, and not to improve it is to make the work harder later on.

Everything that is done or seen should, in short, be reflected in language. It should not, however, be the stupid concert work common in the kindergarten, but free personal conversa-

tion with each child. To see a picture or handle an object while talking about it greatly aids the power of expression, not only in our own, but in a foreign language; so that it should be a rule to confine such conversation as closely as possible, word for word, at least to the picture, if not to the object and to the act.

Standard stories with myths should be told more; and perhaps this ought to be the central thing, or, at least, next to activity. Not only Grimm and Æsop, but some of the Old Testament tales, tales from Homer, etc., can be told, in a most effective way, by a sympathetic teacher, at the kindergarten age. Story-telling ought to be a profession; and if I could examine kindergarten teachers I should regard the test in this respect as second to none in importance. The same story can be repeated. This is the primeval way of education; thus all culture was transmitted before books. Animal tales, perhaps acted out, stories of savage life, of fancy, something of the fairies, with games like hide and seek—and a vast amount of such work in great variety—should be included.

Music should be looked upon as indispensable and made even more prominent. Most of the new music I believe to be cheap and unworthy of the child. The old ballads and songs of nature, God, home, and country educate the sentiments in ways we have never known. There is much to be said in favor of the violin instead of the piano. The teacher should sing, and a great deal of music should be heard. Froebel's standard can here be greatly transcended. Occasional whistling would, of course, be admirable. Songs with action are important here—bad as they are later—for the development of the voice. There is something in the cake walk—which seems to me the very apotheosis of human love antics—that could be utilized for older children, who might be encouraged to act a part and begin to indulge that great instinct of assuming an alien personality with the aid of costumes, disguises, and masques. Children appreciate poetry with alliteration and even slang in it, which has its partial justification; and the sequence and continuity, identity and contrast, which are so much insisted on are utterly alien as principles to the child mind at this animistic age.

Among other things it would be quite germane to an ideal

kindergarten to have a stone and a woodyard, where many stones of as diverse kinds, shapes, color, qualities, etc., as possible should be accumulated, including a load of smooth, variegated pebbles from the beach; and from these up to sizes that the children would have to exert themselves to lift or even roll. There should be a level space for them to pile them into tiny cairns, barrows, cromlechs, make alignment, playhouses, etc. There should be also a generous collection of small boards, large wooden blocks, slats, etc., etc., not entirely without slivers. Here children might indulge their primitive instincts to construct, with material heavy enough to exercise the larger muscles. They could assort them by size, color, shape, smoothness of feel, etc. It would be well also if there were characteristic bits of ore and minerals; marble, glass without too sharp edges, and even coal, and a few of the more common or easily obtainable fossils and arrowheads. To realize what stones mean to the natural child, read Acher.¹ That tells the story. He shows, too, what strings, points, edges, clubs, etc., have meant for the race and mean to-day for children. The children might occasionally be shown the many clever things that can be done, and not too much protected so that there would never be any bruises or petty accidents. Thus the propensity to build, classify, exercise the æsthetic taste, work, develop the strong muscles, learn something about minerals, mines, rocks, mountains could be guided and developed by talks and model exercises. Some stones could be named and tales of the Mythic and Stone Age, and some rudiments of what will later become interest in lithology could be developed by lessons from the rocks. Such a stone and woodyard in a school could teach many invaluable lessons and stimulate tendencies. For the older children, there could be joined framework, boards, and other material to be put together without nails into houses large enough for the children to get into and enjoy, and then taken down and reconstructed. There should, of course, also be bricks for building as well as stones.

Snow in its season is as valuable for constructive play as sand or clay, is more plastic, and young children should be in-

¹ R. A. Acher, *Spontaneous Constructions, etc.*, *Am. Jour. of Psy.*, Jan., 1916, /vol. 21, pp. 114-150.

sured a good deal of experience with molding snowballs and various other figures, making snow men, forts, imprinting their own figure in it, making pictures, and letters, mapping out cart wheels and other patterns for games, digging and tunneling in drifts, rolling and leaping in it, etc. Snow has pedagogic possibilities that are not yet realized. The kind of play it prompts is under the very best conditions, for the ground is padded and cushioned and so incites to new motor activities. The analysis of snow air shows it to be the purest from germs, most prophylactic and stimulating, while the cold adds its wondrous tonic, sending the blood inward to stimulate all the vital organs, and then by reaction bringing it to the surface again in the most healthful way. Thus a snow field is on the whole a better environment for play, and a more tonic kind of play, even than a grassy lawn. Like those with wood and stone, snow plays are a rich, rank soil as yet but little cultivated by the programmist. If anyone doubts the strength of the instinct and its possibilities, here again read Acher¹ on the subject, which as a collection of the most commonplace and obvious facts which only our artifact pedagogues or neurotically tender-hearted parents could ever have lost sight of is a masterpiece. Of course older children may profit yet more here, but the educative influence of these uncurricularized experiences is incalculable.

Mari Hofer has shown much genial ingenuity in devising school-room plays and games that combine body culture, dramatic action, rhythm, and imagination.² After a forest walk, e. g., she vivifies the memory of it by having the children pool each incident they can recall and state, and then rehearse it in action plays, walking, e. g., on heels or on toes as over mud, jumping puddles and ditches, climbing fences, pulling down branches, scuffling through leaves, piling them up and making bonfires and dancing about them, etc. They may even visit the farm in imagination and climb into wagons, teeter, drive, then run over the pasture, play horse, hunt eggs, milk cows, churn, fodder, each perhaps with half a dozen movements and with music. Or they may ride on carts, merry-go-rounds, swing, visit the seashore, play and paddle in the water, bathe, swim, fish;

¹ R. A. Acher, *Spontaneous Constructions, etc.*, *Am. Jour. of Psy.*, Jan., 1910, Vol. 21, pp. 114-150.

² *Plays and Games for Indoors and Out*, Belle Ragnar Parsons. N. Y., A. S. Barnes, 215 p., 1909.

or again, gather apples, make cider, cut, thresh, and bind grain, husk corn, harvest pumpkins, watermelons, pick nuts, dig potatoes, dance about the Maypole with harvest songs. Again, they mimic plowing and pretend to sow seed, to cultivate it, water gardens, pick flowers, graft. Or they may act out primitive cave and tree life, throw, shoot, hunt, kill, skin animals, dress hides, make clothes, weapons, baskets and pottery, build wigwams, follow trails, give war dances, play soldier, go Christmas shopping, prepare the Christmas tree, go to reindeer land, play in and with imaginary snow, act out the jointed doll, the Chinese mandarin, Jack in the box, skate, slide, play soldier, drill, make and break camp, wear uniforms, become cowboys, play each familiar musical instrument, cut down trees and saw wood. There are also games with the wind, and the children can almost fancy themselves clouds, rain, flowers, or trees. They make maple sugar in thirteen stages; bake, brew, shoe horses, make barrels, live in lumber camps, go to sea, are masons, carpenters, shoemakers, and thus act out nearly every characteristic human vocation. Perhaps even earlier they have singular capacity for imagining themselves about every kind of animal they know. They wriggle like fish, leap like frogs, roar like lions, run like colts, growl like bears, and all the rest. They can even roll imaginary hoops and play with fancied marbles or trains, so that almost every kind of movement which they can possibly form any conception of is laid under tribute. Then there is the large body of folk games and carols. These are often sandwiched in with pictures, morning talks, nature material, stories, all kinds of gifts and occupations, all with unity enough for effectiveness and for harmony of the manifold elements, but without danger of interfering with freedom by hypermethodic completeness and system. All is suggestion and stimulation and the concomitant action of the mind and of the body—each spurs on the other to do its best, thus securing very high culture value and affording phyletic recapitulation an opportunity to do its beneficent work. The richness and variety of the feeling involved in such activities without excessive insistence upon special features is admirably adapted to the tender, early stages of nascency of all the powers of the microcosmic soul of childhood. It involves discipline without ceasing to be play. It vivifies myth and fills songs with a good body of material.

We would broaden it yet a little more and even act plays of battles, funerals, weddings, church, some crimes, trials, punishments, possibly having goody children act out the bad rôles, remembering that sometimes feigning evils weakens their hold upon the child's soul; also, conversely, the rough children might play tender parts. In no educational stage can humanity be so completely or so advantageously orb'd out to its full dimensions. Sympathy with all sorts and conditions of men has thus widened the whole periscope of human nature. It also performs moral choice and destinies. Abandon in such activities, though some of them be questionable, can,

we often, in many cases have only the best results for strong and vigorous children, and surely to their interests those of the neurotic should be sacrificed, if either must yield to the other. In the kindergarten we should seek the minimum of repression and the maximum of liberty. Even to be a little bad occasionally brings out correctives that slumber in each individual that his playmates are so ready to help him develop.

The intellectual method of kindergarten thought needs readjustment. It must be made accessible to the scientific movement of the age, which has only lately touched it. It must study and profit by the marvelous School of Infancy, which Comenius, long before Froebel, and no less wisely, devised. It should cultivate children, not in pots, but in gardens. It must study the nature of the child, and abate its cult of an attenuated symbolism. Every child should have opened and kept for it, during its entire kindergarten course, a life-and-health book—such as I have elsewhere described, for the recording of the results of some physical examinations. As Ruskin has well pointed out, symmetry has its dangers, which should be recognized. The kindergarten needs not more knowledge of, and loyalty to, genetic psychology, but there should be more attention to, and a closer interest in, and sympathy with, educational work and organization for other grades. More college women are needed. There is also more sentiment and less sentimentality—a truer conception of the child, not as trailing clouds of glory and faintly understanding everything, but as a lovely little animal, full of helplessness, incapacity, and ignorance, but also of boundless potentialities. Every educator, even the university professor, will profit by a careful study of the kindergarten. The enthusiasm and love of children on which it is based are the very greatest needs in these higher grades. Froebel should lead the present marvelous movement of advance, and not be dragged at its chariot wheels.

I would invoke our wisest mothers, who most glorify the home by the light of their life and example, to let it shine into this institution, which is nearer to the home than any other. I would invite college graduates, seeking a vocation where they can bring to bear all the best that an academic career has taught them, to consider whether the need of more educated leaders here does not constitute a call to them. I would call

the attention of literary women, and of leaders in all the reforms that tend to the development of a sphere for woman as complete and fitted to her activities as man-made institutions are to his, to shed the light of their sympathies and intuitions upon the kindergarten, which has a development in this country far beyond that of any other; and I would urge my professional colleagues in my own department, seeking a field where philosophy can be supplied, to consider this. Froebel himself left his work unfinished; and what he has done needs a higher interpretation, that his spirit be not strangled by his letter. The fight for recognition of the kindergarten is now being won all along the line, but the movement is still too much dominated by its scribes and sophists, so that a wide and vigorous co-operative effort is needed, lest the unfinished window of Aladdin's tower remain unfinished.

V.—Within the last decade, kindergarten theory and practice have happily begun to transcend the limitations of Froebel and have made many new departures in this country. The concentrationists' programmes focus everything—morning talk, gifts, occupations, plays, games, perhaps singing and practical work—it may be for days upon some single topic—a great man, event, natural object, animal, fairy tale, process, etc. About each of these cores, supposed to be more or less typical, there are questions, illustrations, morals, songs, etc., aiming to develop apperception centers and to give unity to the many parts as well as definiteness to details. Kindergartners have shown great originality and made many individual variations in the selection and treatment of such themes, and it would be strange indeed if some were not ill adapted to the child's stage of development or were not hypermethodic; and to those who still hold that Froebel found the only true alphabet of childish activities, these new departures seem shocking and dangerous. Perhaps the worst aspect of this tendency is seen in the ultra-analytic treatment of tales and story roots by our Herbartians like De Garmo, with their sharply defined stages of analysis, synthesis, association, systematization, and application. What can be more unnatural and disenchanting than such a "six-step movement" applied to everything, e. g. to Grimm's *Märchen*? Such pedantic pedagogy almost suggests paranoia. The story is no longer a story but a ghastly skeleton. Assimilative proc-

esses mostly take care of themselves at this stage if the right material is vividly presented. Herbart's culture stages are excellent, first crude guesses at what is now so much better known than in his day; but his conceptions are now obsolete and fit only those pedagogic minds which are in a state either of arrest or degeneration. Observation during the last decade or two, both here and abroad, shows that educators who remain loyal to Herbart suffer not only arrest but retrogression. His psychology gave a new and useful concept of the struggle of ideas among themselves to get into consciousness, which Taine made very helpful to psychology especially in its abnormal forms, and which is laid under tribute by the nascent psychology of the future represented by the Freud school. But to-day this science is coming to be based more and more upon the affective life, which is the all-dominating factor and for which Herbart left very little room. Thus his theories, like those of Froebel, have now little more than historical interest, and all the once vital contributions of both are so far transcended that, to hark back to Froebel for knowledge of childhood or to Herbart for formulæ to interpret educational processes or mental disorders, are only products of the instinct of self-preservation in minds which, however active, are checked in their development and find the vaster problems of to-day too complex to adjust to. They have lost touch with the present in the sense which Janet has lately made so significant as the prodromal stage of psychic dissolution.

Ten years ago there appeared an interesting experiment¹ in which, during two twenty-minute recesses, kindergarten children were given opportunity for perfectly free play, instead of the regular regimentized Froebelian games. There were plenty of toys and the children were actually allowed to do what they pleased. So successful was this test that the directors of it gradually extended this recess opportunity to a part of the school time and allowed the children to choose their kindergarten material, games, songs, and to converse freely about them and to amuse themselves under the guidance of the teacher, so that imposition from them was at least greatly lessened. Only

¹ A Study of the Kindergarten Problem, by F. Burk and C. F. Burk (with many coöperators), The Whitaker & Ray Co., San Francisco, 1899, 123 p.

a small per cent of these children chose the sphere and cubes; and in general, although tried only a year, the experiment was highly suggestive, for it showed how real children differ from the manikin children of the Froebelian metaphysicians with more theory than motherhood in their souls, who have been trained to see in the dark, and often deep, sayings of the childless sage of Keilhau the last syllable of recorded wisdom, and one of whom is said to have advised kindergartners to read him on their knees. These happy Santa Barbara children loved to play animals, as all healthy children do and should. This instinct Miss Blow thinks it fair to describe and condemn as willingness to let children "transform themselves into sneaking foxes and writhing rattlesnakes,"¹ and would forbid all such relapses to the feral stage. These children also imitated many adult occupations in play. This, too, is, Miss Blow thinks, all wrong, because education ought to "deliver from the coercion of heredity." These children, even the orthodox, neglected the sacred circle, drew rough pictures rather than tight forms, cut out inartistic models from paper, played with strings, old boxes, leaves, flowers, feathers, became victims of manifold wild caprices and flouted much of the "traditional material." Worst of all, as if bedeviled, they illustrated the recapitulation theory instead of resisting nature; and this "yielded fatal results," for the chief lesson of life is "restraint and renunciation." Now, in fact, nothing is better established in a broad and general way than the recapitulation theory, manifold as are its gaps and exceptions; and the same is true of the law "from fundamental to accessory movements," which in the last decade has greatly modified kindergarten practice in most of the best kindergartens abroad." No one who knows modern biology, or the laws of inheritance, or criminology, or psychopathology, in all of which these principles are cardinal, has ever dreamed of denying this basal truth; for all evolutionists know that every misfit and exception requires and often has a special explanation;

¹ Blow, Susan E.: *Educational Issues in the Kindergarten*, N. Y., Appleton, 1908, 386 p. This is probably the ablest work this country has produced on the kindergarten and taken with Miss N. C. Vandewalker's admirable and comprehensive survey (*The Kindergarten in American Education*, Macmillan, N. Y., 1908, 274 p.) precludes the necessity of multiplying references to literature, or further description of present status and problems here.

and all such facts usually prove the rule. To argue, as Miss Blow does so earnestly, that to admit that children pass through lower stages in repeating the history of the race is a plea for allowing positive immorality in them, is too preposterous for consideration.

The industrialists seek to curriculize cooking, washing, ironing, perhaps for dolls, and many other forms of human occupation. Miss Dopp¹ bases her programme on the principle that "those racial activities which are most ancient and most prolonged have had the most potent influence in determining the attitude of mankind." "Industry is the matrix that holds within itself the other interests of life." Household precede vocational industries. Miss Patty Hill, than whom this country has produced no more sane and thoughtful exponent of the kindergarten, who deserves to be called the leader of the now ascendant progressives, as Miss Blow is of the conservatives, the publication of whose exposition is awaited with peculiar interest, recognizes that work done for, has a very different effect from the same work later done by, the child. We must provide the child with racial experience in which its own narrow life is often so pathetically poor. We must admit that the stories of primitive times are not very well told by Miss Dopp; but her principle is a sound and valuable one, though her stories do need to be reformed. The Pestalozzi-Froebel-Haus in Berlin applies this principle in some respects better.

John Dewey carries the industrial principle still further.² The school should be a typical community and would fit for social life by engaging in it. As Femly says: "The appropriate food for each of our spontaneous interest is the mass of ideas that engaged the ancestors to whom the instinctive interest is due." Such activities are the articulating centers of life. Early and basal occupations are the "points of departure whence the children shall be led out into realization of the

¹ Dopp, K. E.: *The Place of Industries in Elementary Education*. University Press, Chicago, 1903, 208 p.

² Dewey, John: *The School and Society*. University Press, Chicago, 1907, 125 p. *The Child and the Curriculum*. University Press, Chicago, 1902, 40 p. *The Ethical Principles Underlying Education*. University Press, Chicago, 1903, 34 p.

historical development of man." Thus construction rather than absorption of knowledge should be the end; and on the basis of coöperation and the spirit of service, science, art, and literature can best be evolved. This idea has been put to work with a hundred children and the result has made a real contribution to educational theory and practice. It fadges well with what may be called the lower pragmatism that is not identical with but opposed to humanism. But it has not adjusted the industrial occupations to the stages of child development, i. e., it puts some too early and some too late and often inverts their true order. It also overemphasizes some and neglects other industrial recapitulatory elements. But its chief shortcoming is in its failure to realize how young children, with no opportunity for social selection, assimilate well-chosen myths and literary rudiments, and how disconnected and independent such thoughts are from all forms of industry.

The disciples of Miss Blow, and they are many, feel that Herbart and his followers, Dewey and his group, Schiller, James, and all pragmatists as well as Darwinists, and my own poor efforts and those who may have been affected by them, to whom Miss Blow gives so much attention, all geneticists, laboratory psychologists, and, most of all, students of childhood, are dangerous and are striving to seduce kindergartners from the straight and narrow way laid down by Froebel that leads to the true fold, for they all strive to foist alien ideas and processes from without instead of to develop from within. Miss Blow is honest, sincere, able, well-endowed with and dominated by the instinct of leadership, and so uncompromising that she would ostracize, if she could, from every programme of teachers' meetings, those who urge views that are divergent from those she deems sound. Her discussions often transcend the kindergarten field; and she is one of the dwindling number of educational thinkers who represent in this practical land the now very attenuated influence of the German idealism of Kant, Fichte, and Hegel. Such knights of the Holy Ghost are looking backward and not forward. Happily, the kindergarten has at last broken away from the narrow lines they prescribed for it and has entered the broad field of education, so that instead of being isolated, it is becoming interested in all important movements in this wider field. It is because the kin-

dergarten horizon was in its early days kept so narrow that now in this day of sudden and unwonted freedom from philosophical schematism, there are just now some extravagances and many trialette schemes of very diverse merits; but this is not only inevitable but well, for all true progress is by the method of trial and error. It is high time that this emancipation occurred, for there are large arrears left over from the old days of bondage to be made up. New and able leaders, not one but many, are rising who are throwing to the winds the old prejudices and who know and sympathize with the best that is new as well as with the old. The next decade or two will see far more remarkable advances in both theory and practice than have taken place during the last quarter of a century.

VI.—Turning now to kindergartens in Europe, attendance is always and everywhere voluntary. In England and France, the only two countries where infant schools are a part of the State system, children may attend from three to five, at which latter age England is the only country in the world to compel attendance (the legal age usually being six, only Scandinavian lands placing it at seven). In the Écoles Maternelles children can enter as early as two. In all other countries the kindergarten is either supported by the locality, which is often compelled by law to do this, or else it is a private venture for gain or charity, or connected with social settlement work, and is most provided for the very poor. In both the above State systems, children below school age—i. e., five in England and between five and six in France—receive elementary training in reading, writing, and number along with other work, while in Sweden and Norway, where compulsion begins at seven, the kindergarten has taken little root, and those who attend the few institutions provided before this age draw, model, do cardboard and sand work, play, weave, baste, practice simple gymnastics, but do not attempt preliminary school work. Thus the latter, which in England sometimes begins before five, comes here after seven. In Germany school work is positively forbidden in these institutions.

In the Maternal Schools of France and the kindergartens of Germany as well as of the United States, the children usually stay only from three to five hours daily and are grouped, guided, and taught, and their activities are for the most part

controlled. Meals are rarely served. Where there are afternoon sessions, to avoid the waste of unoccupied rooms, they are usually attended by other teachers or by the older children, and often have a different staff, teachers spending their free time in visiting parents, holding meetings for mothers, who are sometimes even taught kindergarten occupations, etc. Thus this American type has little of the day-nursery spirit, which was instituted originally to care for children whose mothers were at work (Bewahranstalt or Asyle). Here the nurse is more prominent than the teacher; the children are kept longer, perhaps eleven or twelve hours; there is less control; they are fed, washed, given a good midday sleep; more attention is paid to their physical needs, etc. It is fortunately more and more impossible to draw hard and fast lines between institutions of this origin and the three- or four-hour kindergartens described above. If the one has adhered more closely to Froebel's letter, the other when at its best better exemplifies his spirit.

In comparing the American kindergartens with those of Europe, the far greater variety and better adaptation to the nature and needs of children in the latter are painfully apparent. The schedules of many Continental kindergartens not only provide for walks, but often have a curriculum of them with hints for observation, which are taken nearly every pleasant day. In many of them there are ample tree-planted playgrounds and covered spaces, also playrooms besides a garden. Often we find a large number of toys provided as a part of the equipment of the institution, balls, dolls, skipping ropes, spades, pails, wheelbarrows, molds for sand or clay, water pots, various seeds, individual flower pots, also plots, wall pictures, picture books, a few simple mechanical tools—all these besides the standard Froebel apparatus. In some places the children make simple toys. Choicer ones are given them to play with only on certain days of the week. There are often pet animals, both caged and free, which the children may care for or feed. In some of these foreign kindergartens, there are tanks, aquaria, and even small ponds with fish, turtles, ducks, frogs, toads, etc., and sometimes dogs, cats, and even kids and goats with their harnesses and wagons. If there are botanical gardens or especially zoölogical parks, they are visited and utilized peda-

gogically to the utmost. In the playgrounds, rooms, and spaces there are usually benches around the wall, sometimes provided with a back. Playrooms are often provided with a large number of mats, on which the children have their midday nap, when all is kept dark and quiet, the teacher or nurse going about in felt shoes.

There is already a small but interesting literature on toys (although far less than on games), and several toy congresses have been held. In richness, variety, instructiveness, and ingenuity, German toys exceed all others. To this fascinating and important topic, the American kindergarten has made no contribution and has given little or no attention, while in pictures we are far behind.¹

Day nurseries now often employ a kindergartner part of the day or take their children to kindergarten for a few hours, while the kindergartens often receive children before and keep them after the regular period, perhaps employ a nurse, and in general pay more attention to the children's physical needs. In France, there must be a *caisse d'écoles* raised by subscription or local appropriation from which the children are fed, bringing a part of their meal and receiving the rest, helping about its preparation or in the school kitchen. Sometimes there is a special dining room. In Germany boiled or otherwise modified milk is sometimes supplied gratis, and dietaries are selected and food prepared with great care. A *Wärterin* or *femme de service*, it may be, washes and bathes the children, especially in the summer, superintends the lavatories, etc. In Austria and elsewhere, a doctor examines the children monthly, and his services and the medicine are free. The children, too, are periodically weighed and measured to see if they are growing normally, and all these data are recorded in a life and health book kept for each child. Occasionally we find a school medicine chest. Elsewhere apprentices, who may be pupils in the Normal School, serve in the kindergarten; and less frequently those studying to be nurses serve in the day nursery. The former institutions especially are learning much from the latter.

¹ See A. S. Fischer, *Der Kindergarten*, A. Holder, Wien, 1907. Also Report on Kindergarten Work Abroad, by the English Froebel Society, 1909, based on an international inquiry made in 1907. Bd. of Ed. Special Reports on Ed. Subjects, Vol. 22, 1909, pp. 203-283.

The *rapprochement* between the two institutions, as well as infant classes, asylums, *crèches*, and all other institutions that care for young children, is most wholesome, for the infant needs to be treated as a whole, body and soul, and all specialization should be avoided or deferred. While specific day nurseries are much inferior in Europe, as Mrs. Arthur Dodge has shown, the kindergarten has in some localities adopted and incorporated the day nurseries so that the best features of the latter are found in the former. At least the main core of care and provision should be very large and common, and the differential features should be relatively slight. Children need all that is good in all these institutions. In the day nursery, the ideals of health are supreme, as they should be everywhere; while the kindergarten is dropping its aloofness and profiting by the rapidly rising tide of interest in and knowledge of hygiene. Progress here is vital in view of the fact that one fifth of all children die before reaching the age of five. In Italy the Aporti methods of kindergarten lay greater stress upon recreation than upon work, infant gymnastics are stressed, and there is more free play than in the more conservative institutions. In Holland, the so-called Leyden method emphasizes children's hand and garden work, drawing, etc., with a view to developing their own spontaneous activities; while the Rotterdam method brings the teachers and intellectual training to the foreground. Mothers' congresses are usually and naturally more interested in the nursery and the child, and perhaps women's clubs incline to lay more stress upon the kindergarten ideas, the former fearing that the present higher education of women trains them away from home life, are now urging that college departments be established where young women shall be trained in all that pertains to motherhood, children, and child care, as well as in academic branches, and that all women students, especially those who would teach, should not disdain but desire to come in contact with young children in a healthful, practical way and qualify to enter day nurseries and kindergartens and to combine their best features, to know something about children, their teething and teeth, about the milk supply and the many problems that center in it, atypical and subnormal children, common diseases, emergencies—cuts, bruises, burns, bandages, etc. They should be able to answer

intelligently earnest practical questions of young mothers on such topics as hammocks, perambulators, orthopedics, institutions, weaning, whether the teaser or false nipple causes adenoids, midwives, the regimen for impending motherhood, parental care, and do extensive service generally. They should be solicitous for the social as well as the sanitary environment of the child, learn to do neighborhood and home work, so they can be not only teachers but foster mothers interested in children's welfare during the entire twenty-four hours, extending down to tenderer years the hygienic care now taken during the school age, insisting that all be properly fed at home or in school before they can be properly taught. They should know a little of the important charity agencies, social settlements, outpatient hospital work, that pertains to children, and all the other scores of organizations designed for their welfare, so as to be resourceful.

The most cursory survey of foreign conditions shows that the conservative American kindergarten is far too isolated, its training schools too highly specialized and narrow, and its spirit too academic to render the best service to the greatest number in the community. Its animus and method to-day no whit more represent the true Froebel than Aquinas or Calvin did the true Jesus; and in perusing the most systematic of our kindergarten literature, the question incessantly arises whether these sapient writers can possibly ever have carefully read Froebel, whom the nine points enumerated, I believe, truly represent, but which the main drift of their writings so often directly contradicts. As only parts of his tomes have been translated into English, his scriptures are at least withheld from the laity, and I have begun to question whether any one, not only of them but of the leaders have truly, candidly, and completely read him. They have of course glanced over some of the familiar proof texts that illustrate their own views; and Froebel, it must be confessed, is so full of uncoordinated, if not opposite, *aperçus* that his harmonists will never entirely agree. If my interpretation of him be correct, he would be appalled and horrified at much that he would find in the average American kindergarten and would vastly prefer a good day nursery. Indeed, I fear that the university patronage and atmosphere, in which kindergarten exposition has lately been

placed in several centers of learning has injured rather than increased its practical efficiency and made it more apart and theoretical, and weakened its ideal of social service which ought to be paramount. It is doubtful if Froebel could possibly have been successful as a professor, and had he done so his message to the world would have been impaired, although like Pestalozzi or General Booth he would have had pithy and pregnant things to say occasionally to academic circles. Froebel was not a philosopher or thinker any more than he was a scientific student or observer of childhood, nor was he a great organizer, but a deep-souled mystic with the mind of a poet, not very virile, but with a good touch of the best femininity in his soul. He loved and yearned for poor and neglected children, to whom he would fill the place of father and mother, and he divined their nature more deeply than anyone had ever done before. His sagacity in many points has since been demonstrated by science to have been prophetic, but his horizon was limited, his opinions often fallible, and in general far inadequate to the vastness and complexity of the infant soul. Hence to-day they are in crying need of being supplemented, amplified, occasionally corrected, and in some definite respects abandoned. He thought and felt much as the best women think and feel. By his knowledge of the child he also came to know and to profoundly affect the motherly element in woman's soul as few men have ever done; and so for those to whom motherhood is denied, he is a most wholesome ideal whom it seems to many of them hardly less than sacrilegious to uncrown, since this kind of devotion tolerates no suggestion of imperfection in its object and the thought of any possible rival is intolerable. Woman loves an authority to appeal to, whom she can accept without reserve and from whom there is no appeal; and the American kindergartners have too often come to accept and quote what Froebel said, did, and meant, as interpreted by them, almost as holy writ, until now the new and higher criticism of his text by child study, that would reinterpret his letter by his spirit, raise everything to a higher plane, and give us a new and truer Froebel, is repugnant to them. They should consider it as fortunate that the critics are disposed to take the humbler attitude of fulfilling rather than that of destroying his evangel.

When the stereotyped kindergartner learns that in the Transvaal, e. g., the children often spend the entire day out of doors, take naps on rugs, in camp chairs, or on the leaves under the trees, as in the forest schools for tuberculous children, or that they are encouraged by appeals to their parents to sleep in or out of the open window the year around; that in Denmark sometimes stress is laid upon box beds of a peculiar hygienic make; that elsewhere emphasis is laid upon swings to cultivate rhythm with all its deep meanings, upon teeters, seesaws, merry-go-rounds, or rocking-horses; that sometimes the cottage system, and elsewhere gallery lessons loom up in importance; or that the systematic study of the environment is made paramount here, or dusting, sweeping, bedmaking, and other housekeeping activities there; that some find precious educational values in making dolls' clothes; that there are places where the instruction in the vernacular to those of foreign birth or parentage is made the chief feature; that nearly all forms of fine work and small objects have been banished by positive enactment from the German schools, and from many others by general consent; that sometimes wall charts or brush work, or again free play, or certain topics of child study are now introduced and actively cultivated; that in some places, perhaps most in Japan, the kindergartens for the poor and for the rich are so radically differentiated as to have little in common; that douches, boiled water, separate towels, making of artificial flowers, knitting stockings, are cultivated; that for the poor the kindergarten is sometimes kept open all the year round as well as all day; and that often elsewhere the rooms are occupied all day in relays of both children and teachers; or that the curriculum varies radically with the seasons; that in some places all attempts at system or uniformity have been thrown to the winds, and that the teacher's personal conviction of applicability leads; or that matter dominates form—these things cause in many of our kindergartners an uncomfortable feeling that such doings are not according to Froebel and therefore are questionable.

VII.—Froebel said: "Wouldst thou lead the child . . . Observe him and he will show thee what to do," and yet we cannot and must not forget that a dark cloud of ignorance hangs over the kindergarten age. Some scores of individual

studies have been made upon infants from birth on, often up to the third year, and collective studies of children from the beginning of the school age on are far more common. But the child of from about two and a half or three to five or six years of age is relatively unknown to science. Of no stage of human life do we know so little. The kindergarten has contributed almost nothing to child study and has been less affected by it than any other grade of education up to the university. Even the growth rate, diseases, development of language, spontaneous games, plays, automatisms, runaways, powers of control, rhythm, fatigue, ear-, eye- and motor-mindedness, conceptions of nature, man, nascent religious ideas, the nature of imagination, faults, capacities, etc.—each might be illuminated by a single thoroughgoing investigation. Till such is made the kindergarten will not be unlike an air plant with no roots in earthly soil. Its principles and practice will lack all scientific basis and control, while tests and standards will remain impossible. There is no authority or recognized criterion on anything in it and now that it has definitely broken with the hide-bound dogmatic orthodoxy of the Froebelian Epigoni and has entered upon a larger trial and error stage, this lack is more palpable and deplorable. In higher grades of education many things can now be proven and many questions are settled by appeals to researches that are authoritative, for experimental didactics has laid certain foundations that seem to stand firm, but here nothing of the kind exists. Miss Blow bases on Froebel and philosophical principles; I, who hold almost the opposite opinions, base them upon what is known of children before and after this age, and infer from this as best I can; the most sagacious and practical kindergartners in this country now base their views upon native, womanly intuition into the nature and needs of this metamorphic age. But none of us can prove ourselves right by citing more than two or three studies of this period. Till there are such data we must go on by the same methods of tact and sympathy that have prevailed ever since savagery in the training of children, with only the additional light that progress in other fields reflects into this obscure region. Is it ungallant to suggest that this state of things is purely due to the fact that no man equipped with modern methods has ever entered this field? If so, should not provision

be made at a few favored localities for training investigators to lay down conditions and direct studies so sadly needed here? With so much ability and enthusiasm and so many methods now in operation it would seem that it needs but a touch of intelligent direction to redeem this rank, rich field for scientific pedagogy, for none is so inviting, so ripe, so certain of yielding, under proper cultivation, such precious results both for science and for education.

Yet, and finally, a very few studies in this field must be mentioned: Earl Barnes asked 420 boys and 346 girls, mostly five years old, whom they would wish to be like and why, and analyzed their answers.¹ Miss Louch found children in England often look with dislike upon the position of grown-ups²; "but in America even kindergarten children are striving toward their future estate." Most want to be like some relative (some thirty per cent of boys would be like their fathers and of girls like their mothers), and over ninety per cent at this age would be like some personal acquaintance. "In this study eighteen per cent of the boys chose women and girls as ideals, while but five per cent of the girls chose males; thus reversing the conditions which prevail later in life." Of girls, ninety-five per cent chose their own sex as ideals, showing that even from four to six sex fitness is more awakened in girls than in boys. Other evidence here gathered shows that "American children struggle away from their childhood more rapidly than do the children of any other nationality." Miss Young³ showed that in England children in the lower classes have their attention fixed more closely and earlier on future vocations than have children of the freer classes. In this country this is probably less true among children of the native-born population than among those of immigrants. School means most, and home least, to Hebrew and Italian children. Barnes raises the question whether it may not be best sometimes to make the school the conscious ideal rather than the home, where the latter can never be made very good. American children do not, as a rule, put the school first. They also choose most ideals from romance and animals, indicating a livelier imagination and freer attitude of mind, which goes with exemption from excessive poverty. The reasons for choices at this age are chiefly activity: they would be like father or mother because they work, or soldiers to fight, carpenters to saw,

¹ Louch, Mary: *Ideals of New York Kindergarten Children*. Kindergarten Mag., 1903, Vol. 16, pp. 86-100.

² Differences between Children and Grown-up People from the Child's Point of View. *Ped. Sem.*, 1897, Vol. 5, pp. 129-135.

³ Young, Sarah A.: *A Study in Children's Social Environment*. Barnes's *Studies in Education*, 1902, Vol. II, pp. 123-40.

seals to flop in the water, pussy because she plays, a bird to fly, a policeman to arrest folks, a girl would be a boy so she could swear, etc. Often their ideals are expressed by vague words, like "nice," "smart," "good," etc. "Little children love to love rather than to be loved." They are not immoral but unmoral. The American father and the Italian and Irish mother are most attractive.

If the kindergarten has done little to advance paidology, it is one of the best fields for the application of its results; and the time is near when every reputable training school will have an expert in this work. Like the nearly two score other types of child-service agencies, local and national, lately convened at Clark University (June, 1909), the need is felt of making its work more professional and its theory more scientific, as well as of correlating child-welfare organizations in the interests of the unity of the child, and to avoid duplication and conflict between diverse aims and fields. Civilization is awakening to the fact that it is in danger of losing touch with the child, service to which is in a very pregnant biological sense the ultimate criterion of the worth of every human institution and endeavor. Hence the teacher can hardly think too highly of his or her calling.

CHAPTER II

THE EDUCATIONAL VALUE OF DANCING AND Pantomime

The idea of dancing—Children's interest in it—Dancing is a passion with old and young—A new type of motor-mindedness—A sketch of the history of dancing from ancient through mediæval times—Its relations to religion, also to myth and folklore—Our national poverty in festivals and their revival—Relations of dancing to gesture, play, love, war, history, gymnastics, rhythm, music, inflection, mimesis and pantomime—Use of expressive movements among primitive people—Greeting—Rituals—Imitations of vocations—A mode of expression for the feelings—Deaf-mute expression and pedagogy—Dancing as one of the chief expressions of the joy of life.

DANCING I would describe as the liberal, humanistic culture of the emotions by motions. Feeling and movement not only fit, but intensify each other, and to a degree, by changing either we change the other. Herein lies the great educational potency of dancing, and this makes it the best of all illustrations of harmony between mind and body. If we wish to be Teutonically profound, we may say that the first vocal utterance, viz.: movement of the vocal organs, was only incidental to a dance. The first sound was an accident to the dance, seized on by the ear and developed into speech with all its music of poises and accelerations, stresses, accents, inflections, cadences, timbres, pitch, etc. Thus music, too, originally vocal, in this rather tenuous sense, had its origin in the dance. On the other hand, pantomime and mimesis were gestures appealing to the eye, and these, too, may become not only conventionalized but systemized. Although it may become a highly technical art, dancing is best conceived as an originally spontaneous muscular expression of internal states, primarily not with the purpose of imparting, but for the pleasure of expressing them. Thus the pedagogic value of dancing is to enlarge the emotional life by making all the combinations of movements that

it is mechanically possible for the body to make. Ordinary life, not only of work but even of play, leaves unused sets of activities, and as these atrophy the feeling—states that they express tend also to fade, and so life grows partial and fragmentary, and we fail to experience all that our heredity makes possible. Thus all should dance in the sense above described for their own psychic welfare, for it helps the young to orb out the soul and keeps that of the aged from shriveling and invagination. Thus we have here another of the ways in which we draw upon the immeasurable wealth of life represented in our pedigree and make the best and most vital in the careers of our long line of forebears live again in us. We resurrect their joys and bury or even perchance participate in their sorrows. Our age of drudgery and strain alternating with too passive pleasures knows little of the resources of dancing for education and all-sided development. Till the recent movements looking toward a revival of its pristine power, we had allowed it to dwindle to a pitiful relict.

Most children begin to feel interest in dancing about the dawn of the school age, but chiefly in connection with acted stories and with music with strongly accented and simple rhythm. But this interest is languid until the adolescent reconstruction is well under way, when zest for it is greatly reinforced. Something is wrong with the boy or girl or their parents or teachers who cannot learn or does not love to dance in the middle teens. But the sexes are inclined to very different types, girls taking to the graceful and more conventional, and boys to the more extravagant and even original, e. g., clog, gymnastic, cake-walk forms. Instructors have not sufficiently recognized these marked diversities near the beginning of the nascent period for dancing. From Mrs. Barber's questionnaire issued here and answered by many instructors and experts in the art, and from other sources, it is plain that there are occasionally born geniuses who love it, dance when alone for pure enjoyment, and sometimes teach themselves. In many small theaters on amateur nights, which offer an open stage and prizes to all comers, one occasionally sees not only much expertness but on rare occasions real originality, and always intense interest. Rarely indeed do we see among professional stage dancers a true artist born and made, but when such an

one appears and startles the audience by creative talent, then we awaken to a thrilling sense of what the higher poetry of motion may mean and do. Its great psychotherapeutic value when stimulated or inspired by good music is beyond all question. Although excitable and maniacal cases may be overwrought and profound melancholiacs unaffected, its influence is growingly appreciated, not only for the patients who participate, but for those who only look on. Its prophylactic value is probably greater than we yet realize. In home and school I would plead not only for more of it but especially for more of its cruder and unconventional forms in their season, such as free if sometimes wild capering, cavorting, acting with plenty of facial mimesis, for this not only allows awkwardness and self-consciousness to cover itself and removes repression, but gives flexibility to muscles and facilitation or *Bahnung* to nerve tracts. Too rigid insistence upon the proprieties and often stilted formalities of the dance seems to the growing boy in the awkward age a very formidable affair, and rather than try to train himself to it he is liable to turn away from dancing entirely before he has fairly felt its full charm. First of all, then, there should be incitement to move freely and vigorously under the stimulus of music and, for the sluggish, music of an irresistible kind. When this old association between music and motion is well established, then refinements may begin.

Nor for young people must the phenomenon of second breath in dancing be regarded as either a symptom or a provocation of hysteria or nervousness, although it may be so in neurotic cases. This phenomenon for the young who are entirely normal is probably promotive of arterial and cardiac elasticity. The abandon it brings must not be too wild or extreme, nor so prolonged as to bring excessive tire, for in this state the fatigue sense is itself fatigued and resources are overdrawn before we know it. But indulged in with temperance and duly controlled while it lasts, this experience is now thought not only to enlarge the circulatory and strengthen the nervous system, but also to lessen the proclivities to sex erethism and in some degree to vicariate for it in a salutary way. The kind of tire it brings abates passion by providing for its tides more healthful muscular channels. This both answers to

syllabi and personal conferences indicate. If danger is increased during the time of general excitement, it abates markedly afterwards, leaving not only the motor but the mental capacity for work under high tension and pressure augmented, and also increasing the probability of the subsequent sublation of temptation when it next arises in more spiritual forms. We meet thus here one aspect of the doctrine of the so-called higher powers of man, but from this standpoint can realize how signally James fails to understand what the above experience itself should teach, viz., that men who habitually live and work at their highest potentiation make themselves sterile, as according to Herbert Spencer all forms of over-individuation are inversely as genetic power. But this topic deserves more exhaustive psychological treatment than is in place here.

Again, empirical data show that nearly all are impelled to dance by some kinds, and that some are thus impelled by nearly all kinds of music. This fact has never been given an adequate psychological explanation. It can hardly be at root due merely to the tab-keeping instinct on which counting rests, which has its morbid exaggeration in arithmomania. Nor can it be explained by the fact that reiterated acoustic beats constitute a summation of stimuli that tend to motor discharge, although both these may enter as minor or secondary factors. It is probably chiefly because since primitive music was strongly rhythmic, the drum being perhaps the first instrument, it was long made by beating or for dancing and marching so that this association became inveterate, leg movement being the chief movement of the body under voluntary control. That cadenced steps constitute an apperception organ for certain kinds of music and bring it home to the soul far more than when it is inertly heard, there can be no doubt. Primitive song, too, may have been more intensely pantomimic than we know and used at first chiefly to eke out dramatic action. At any rate, here is a problem that cannot be explained by any known psychophysical apparatus or process in man to-day without recourse to psychogenesis.

Again, from the studies of the reverie-like imagery suggested by music it is plain that there is a very wide range of individual differences in these, so that the same sonata, e. g.,

suggests very different psychic scenery to different persons. Although we have not yet sufficient data to settle the problem, it is probable that the free motor interpretations of music by different dancers would be no less different. Motion, however, seems closer to music than is the scenic imagination, as well as capable of more adequate expression of it, and its translation into action has thus greater educational value. If music impels us to feel again the submerged experience of the race in a dim, confused, massive way, dancing impels us to act it out, and both probably represent a wider as well as a farther range backward into our phyletic history than does even play, considered from the viewpoint of recapitulation. There are probably extremely motor-minded persons to whom perhaps about every kind of music has its own dance at least if we include the stillness and quiescence positively prompted by it as in the above broad concept of dancing. While translation into motor terms undoubtedly helps to the understanding of most music, it is also certain that this applies on the whole best to music of a simpler kind. Complex and involved music impelling as it often does to different and often contradictory and otherwise impossible movements, it is, of course, vastly harder to interpret thus. Such music often suggests passive movements like hovering, floating, being swept by tides or swirling currents, or laid to rest, put to sleep, made contemplative and entranced, if not paralyzed. But the play upon the ranges and registers of not only voluntary but involuntary emotivation is incessant and the life of feeling which it widens and enriches is gagged and repressed without at least incipient movement.

Answers to syllabi show that not infrequently people in middle and even later life develop a strong desire to dance, as did Socrates. This is not devolution or reversionary toward second childhood but a retarded or undeveloped impulse asserting itself. I have a few pathetic cases of clergymen and others who upon their first exposure to the charm of dancing, in the home, in school exhibitions, or in gymnasia, where some other name was given it, or even where it was first frankly seen and known as such upon the stage, were fascinated by its influence and filled with a pathetic sense of the innocent joy of life that might have been theirs, and sometimes have adopted rather fantastic ways to atone for their loss. The Greeks had dances for those

in middle life, both men and women, as well as for the aged, which, like other choragic creations of antiquity, are, of course, lost. A poet interested in the intricacies of prosody or a musician in the days before the diatonic system, when modes and modulations were so effective and the use of which is now largely lost, might well cultivate this art. But the spontaneous senescent infection with the Terpsichorean spell, which was not tarantism and not religious fanaticism, seems a unique phenomenon of rejuvenation. It is as salutary as it is inexplicable. It is hardly comparable to restored normal vision or repigmentation of hair in the aged, and probably will not be explained till senescence is as well known as is adolescence. Psychologically it is not without analogies to conversion, which belongs in youth but which may also occur late in life. In the hygiene of old age it will certainly one day have its place. The phenomenon is one which may suggest that at a certain stage of post-maturity there is a normal physiological as there is a deep-seated psychic tendency to pause and complement life, make up arrears, wait for belated lines of development to catch up; or, in a word, a final round-up of powers and potencies before the withering effects of more advanced age set in toward final dissolution.

Dancing manias present another difficult problem to the psychogenesist. Why their extreme infectious quality and why the loss of all inhibition and the passion to dance to the uttermost limits of endurance, till complete exhaustion and sometimes death supervene? The exhilaration may become positive inebriation. The dancer feels inspired or possessed, attains ecstasy, vision, or trance, lets himself go with rapture, perhaps mutilates and may even slay himself in mad frenzy. He leaps, shrieks, is convulsed and frantic, loses all control, knows no restraint, exposes his person, violates every decency in both his deeds and his words, becomes outrageous, orgiastic, raving and bacchanalian. In all these historical more or less licensed excesses we can only see the outcrop of a profound instinct to occasionally break away from every constraint and throw off all the countless repressions of society, especially on the part of those whose lives have long been cabined, cribbed, and confined, and give free rein to every impulse. It is a physiological declaration of independence from every sort of control,

as an eruption through superposed geologic strata vents the primeval volcanic forces held in check it may be for unnumbered generations. The study of such phenomena gives us an unparalleled illustration of the forces that slumber deep in human nature and occasionally wreak themselves upon expression and play havoc with all the incrustations of conventionality. Thus, in the Platonic sense, a drunk may occasionally unlimber human nature, stir up its sediments, or resolve man back to his evolutionary, first, animal principles, melting down into their elements later acquisitions and perhaps sometimes reinforcing older fundamental energies that had become quite rudimentary. Perhaps no spectacles within the historic period have shown humanity so denuded of all that long periods have brought, or exhibited so clearly the elemental powers which civilization has done its uttermost to tame and harness.

Here I would raise the question whether there may not be a hitherto undiscovered type of motor-mindedness in which dancing is an organ of apperception. As there are people with number forms and even letter and word forms, and very unique types of synæsthesia, may we not have a class of cases, though they be as rare as that which Pierce¹ describes, in which efferece of the dance order is exceptionally identified with the appreciation of words, phrases, poems, as it is in born dancers with music?²

A Glance at its History.—Dancing includes such bodily movements as are subject to definite rhythmic rule and performed to the

¹ Gustatory Audition, Amer. Jour. of Psy., July, 1907, vol. xviii., pp. 341-352.

² Motor-mindedness takes in me, I think, a unique form which I have never found anyone who understood, any more than number forms or phonisms and photisms are intelligible to those who do not possess them. The earliest illustration of this I can now recall was as a boy of about seven when I remembered the names of the three Bible characters in the fiery furnace by a very definite rhythmic caper. Shadrach was a step right with the right foot, the same with the left on the first syllable which was long; and on *drach*, the right foot was brought down with a smart spat of the toe. Meshach was the same with the left, and *A* were two steps front, *bed* was a high kick with the left and *nego* was coming down on two feet successively. I remembered these names by these movements which belonged to them and to nothing else, and to-day, when these names occur, I think not of the printed forms but of these movements. I used to wonder that my parents and other people did not understand when I went through the performance and asked them what it meant. Many a phrase often not understood and many a nursery jingle, some Indian sentences my father knew, and later choice bits of poetry not directly sug-

accompaniment of the voice, instruments, clapping of hands, or stamping of feet. Of old, it was often a solemn ritual full of state and ancienry. The character of people may be often learned from their dances, and Molière says that the destiny of nations depends upon it. Funeral and death-bed dances are an almost world-wide

gesting action "spelled" to me different movements, often quite complex. It was, I think, later that pantomime and florid gesticulation came in to aid these dances or rituals. The simpler ones were sometimes instant and spontaneous, and for others I spent often considerable time thinking out and practicing the appropriate expressions. Ridicule tended to make me more solitary in these activities and to repress them, though it did not check the propensity to think out appropriate symphonic movements. Especially of cadenced passages I devised a very crude set of symbols that I noted on margins and between the lines, although on looking over these old books, I can now interpret but few of them. During adolescence, this instinct attached itself more and more to music, and here it is just as strong to-day at the age of about sixty as it was at eighteen, although it is more inward. While it is strongest for lively dances, no music is complete to me without action, and in reverie I am very prone to think out phrase by phrase the gestures, postures, etc., that precisely express each and could belong to no other. My ideals are not only far beyond my own capacity to execute, but I never saw a professional dancer, however ingenious, original, and agile, that fully came up to my notion in most respects, though many of them give my own motives.

The human body is far more complex than the musical scale and is capable of expressing not only every phrase and measure, but chord and note; and anything in any music that mimesis, sign language, posture, etc., cannot explain and reinforce, is not true music. Moreover, we cannot possibly appreciate or feel the full force of a musical motive until we have put it into action. Both music and expressive motion are the language of emotion and they began and still belong together. To think music is to think motion, to explain it is to set it in motion. Most dances merely mark rhythm and so are but the skeleton of the true nature of orchestration. This modern dancing is wooden and intellectually lazy. To passively listen to a concert is as far from true æsthetic appreciation of music as mere dead articulation from eloquence. With the attainment of this, however, I am emboldened to describe my peculiarity because I have come to think it not a deformity, but a rudimentary psychic organ that has accidentally survived in me from an age when choral worship and festive song originated. Perhaps my ineptness as a musical performer is because my whole body responds to music in too generalized and primitive a way to permit specialization and virtuosoship.

In my musical reveries, I do not need kicky ragtime melodies or even the intoxicating Hungarian dances, the tarantelle, the saltarello, mazurka, redowa, still less the more common ballroom dances, to think out sometimes with great detail the pauses and motions from the stillness of sleep and death to the most rapid, frantic, and even impossible gyrations, somersaults, flying leaps, hovering in mid-air, every limb and finger, eyelids, mouth all in harmonious movement, with elements from natural sign languages, oratory, the gestures of every industry, people, game, and even animal movements. Were there a motive for all this, I fancy I should be a great choral composer, though I fear I should often require the physiologically impossible of my performers. When playing the piano with my hands or even with the pianola, I am often troubled with the intricacy of the innovations.

custom. The dance is the expression of emotion and depends upon the power of the heart to feel, for dance and music are a married pair. Perhaps primitive man vaulted and skipped rather than danced as he screamed and shouted before he sang. Many primitive people sing and dance simultaneously. Many of the oldest folk songs were dance songs.

Sometimes my imagination sees men, women, children, sylphs, fairies, fawns, and even animals going through illustrative activities, but most of my subjective accompaniments are efferent and I am more faintly doing it all. Several times I have tried to write out under the staff a description of the movements needful to elaborate the notes, but it would require perhaps a page for every few measures, and even this would be inadequate. Moreover, to attempt such illustrations I cannot readily overcome my sense of the invincible silliness it would have for others. This motor scene setting differs much with each of the great musicians. Perhaps the most breathlessly difficult and exasperating in my repertory are Chopin's two *krakowiaks* in which the contrast between the slow heavy bass and the ineffably rapid and flitting, and, in passages extremely complicated, right-hand parts is so great, and a ponderous elephantine tramp must be synthesized with a spiderlike agility. But a close second to these is Wagner's *Feuersauber* and the *Waldweben* and the Rain and the Water motive in Senta's ballad and other descriptions of nature. These have troubled me for years and I keep changing my interpretations and forgetting the last. Compared with these, most of the movements in Beethoven's sonatas are easy, though I feel that mine are yet too simple and need greater elaboration, but with time and effort I could satisfy myself and leave little unexpressed. Liszt is simply mad in spots and seems to me in many of his passages and transitions the least motor-minded of all. He was not a great composer, but only an exhibitor of technic. Singularly enough, many if not most dances although designed for motor accompaniment are often rather hard to give appropriate expression. Most good sacred music is easy. The one general principle that can be laid down is that high notes tend toward my right and low toward my left, that stress brings one forward and pianissimo movements backward, while the former are far more emphatic than the latter, and that no movements must be repeated unless the music is repeated and that they must be as differentiated as it.

I wonder if we do not have here a true and new old criterion of music and if, as it cadences the soul, it should not also admit of being cadenced in graceful activities! How far is it the culminating edification of this supremest of arts to suggest all the characteristic movements possible to the human frame and perhaps still others once habitual in man's pedigree, but which with his present organization he is no longer able to execute, but can only dimly feel? And do not passive movements also play a rôle in this process by which the ancestral neurons are more or less awakened? Sometimes in hearing music, we thrill, sob, and even shed tears in the most sudden and inexplicable way, or feel elated, soothed, and exalted above all care and trouble, experience pangs of woe or ecstasies of joy, are made timid and intense, if not positively angry. An art that can thus play upon all the gamut and secret springs of emotions can do so upon current theories only by causing physiological movements, faint and unconscious or apparent, and may we not conclude that music is at its very root and core addressed to motor impulses often latent and residual and still capable of being played upon? If so, it is a magazine of appeals to restore vestigial processes in the soul and to thus keep us in

It must be confessed that there is a general tendency downward. The skirt dance was at first a praiseworthy effort to substitute graceful drapery for the penwiper costume and tiptoeing of the ballet girl, but it is sinking to the level of ta-ra-ra-ra-boom-de-ay.¹ To see dancing from pure lightness of heart, we must go to exiled or oppressed nations—Poland, Ireland, the Basques, and Jews. Mrs. Grove says: "For the last five years I have given my time almost entirely to the study of the history of the dance, and the deeper I get into it the more I become convinced that the religious dance has been the foundation of all the others. There are instances where the absolutely secular form of the dance seems to preclude the notion of its ever having formed part of a ritual, but I believe this only arises from the limitation of our knowledge and from inability to

touch with our past and to prevent the atrophy of unused functions. This, at least, I think it is to me.

A practical point of no mean consequence is the tempo used or preferred. Some dancers have an acquired, and think they have an innate, *penchant* for ♩ or ♪ or other time, and their execution is more strongly sustained by one of these than by any others. These varieties ultimately resolve themselves into three, two and four, time, the order most frequent in answers to syllabi. Thus groups of three seem to be most readily organized into higher unities and to have more carrying power. But surely measures of all components should be used and specialization here involves, as everywhere, limitations. Rhythm is fundamental to even the sentence sense and to thought itself. Just as poets adopt certain meters and combinations of feet, while others that prosodic law sanction are rarely used, so dancing strongly tends to eschew many sorts of time which are still found in obsolete dances to the tempo of which much music has been written, and some meters once common now seem hard and even unnatural. Perhaps every dancer has limits beyond which new and harder tempos impair or interfere with facility in forms already acquired. All that can be said is that as wide a range as possible within such very diverse individual limits should be secured.

¹I am indebted for these historic paragraphs first to Mrs. Lilly Grove, and others. Dancing, Longmans, Green & Co., London, 1901, 454 p. Also to G. Desrat, Dictionnaire de la danse, historique, théorique, pratique et bibliographique depuis l'origine de la danse jusqu'à nos jours. May et Motteroz, Paris, 1895, 484 p. Arden Holt, How to Dance the Revived Ancient Dances. Horace Cox, London, 1907, 158 p. The Association for the Promotion of Folk Dances, Copenhagen. Old Danish Folk Dances, translated by L. S. Hanson and L. W. Goldsmith, 1906, 24 p. Music by Sextus Miskow, 23 p. Caroline Crawford, Folk Dances and Games. Barnes, New York, 1908, 82 p. Jakob Bolin, Swedish song-plays used at the New York Normal School of Physical Education. Bolin, New York, 1908, 21 p. Dr. Karl Storck, Der Tanz. Velhagen & Klasing, Bielefeld, 1903, 140 p. Rudolph Voas, Der Tanz und seine Geschichte. Eine kulturhistorisch-choreographische Studie. Seehagen, Berlin, 1869, 404 p. Reginald St. Johnston, A History of Dancing. Simpkin, London, 1906, 197 p. Marie Luise Becker, Der Tanz. Seemann, Leipzig, 1901, 210 p. Franz M. Böhme, Geschichte des Tanzes in Deutschland. Breitkopf & Härtel, Leipzig, 1886, 2 vols. Gaston Vuillier, A History of Dancing. Appleton, New York, 1898, 446 p.

trace the dance far back enough. Wherever this is possible, I arrive at the conclusion that it was once a form of worship, or at least a form of magic." The pagan dances were for worship, war, and medicine, and the Shakers and Jumpers to obtain the Holy Spirit. Dancing is often a mystery revealed only to the initiated and carefully hidden from others. It is probably common to all races, and is found among certain animals and birds. Sometimes dancing is divided into three kinds—imaginative, or the poetry of motion; descriptive, or orgiastic; and the ritual, or worship dance.

Greek sculptors studied and designed the attitudes of public dancers. In the early centuries, the Christian church allowed dancing in its consecrated walls. Orbicular dances of paganism; the Orphic and Dionysiac ritual and liturgical dances; the tragic choruses; the English carols, originally sacred dances; the *Reihen* of Germany; the rondes of France and Belgium; the polka, born in Bohemia, which so delighted France and England that politics were for a time forgotten; the hornpipe of England; the waltz of Germany; the reel of Scotland; the slow and stately pavane; the tordion and gaillarde, with three lively jumping steps, interspersed with much kicking, skipping, and gliding; the courante, a court dance, with much pantomime; the minuet, so called because of its small steps; the gavotte, a peasant dance in costume, often with a dance song; the bourrée, with song or instrument and strong rhythm, but careless and almost yokel form; the farandole, which can be danced only by an unmarried man at a christening, birth, or marriage; the chaconne, a Spanish social dance; the contradanse; the quadrille; the carmagnole, which is almost like a cancan; the polonaise, which reflects the spirit of the old aristocracy of Poland; the lively kosaka and the redowa and varsoviana; the gypsy dances, that have inspired a new school of music; the strathspey from the Spey valley, slower yet harder than the reel; the saraband, with its grace and dignity; the coranto, la volte, trenchmore, brawl, passamezzo, the milkmaid and Maypole dances; the morisco; egg, cushion, sword, and shawl dances; war and the various weapon dances; the plugge dance, a Dutch fandango; the ballet, which acts and represents almost everything in life; the bolero, a very light but short, skipping dance; the cachucha, the jota, the saltarello, the tarantella, Sicilian, trescona, the nautch dances, the bayadère—most of these suggest the variety and ranges of the choreographic art.

Perhaps the most striking fact about Egyptian dances was that they were a necessary part of every religious celebration, and were held in honor of the dead. The movements were slow and contorted, and sometimes a friend personified the dead man, imitating his qualities, good and bad. The dance women, or awalim, which meant wise or learned, attended every feast, for to rejoice meant to dance. The Mohammedans leap, whirl, and howl to maddening intoxication, because it is so good to see Allah. A modern Egyptian dance, called the bee, is a solo expressing the pain of being stung.

Only when a nation becomes artificial, does dancing fall to the level of an amusement. Among the ancient Hebrews, it was chiefly an act of gratitude for victory or an accompaniment to a hymn of praise. The motive was solemn, perhaps to express deliverance. Only in degenerate days did it become promiscuous or obnoxious. Choral night dances with torches are common and very impressive among the Eastern Jews. Salome's dance before Herod, the topic of so many artists, indicated decline. A Jewish proverb is that he who does not rejoice at a dance does not know what joy is. Delitzsch says that the taste for dancing grew in the later Hebrew period, when the Lord must be praised with timbrel and dance, as also at the feast of atonement. In Poland the joy at the expected deliverer, that shall make them a nation again, breaks out in song and dance in the synagogue.

In Greece, where the soul was defined as the harmony of the body, dancing was a method of developing a fair soul in a fair body, and here poetry, music, and dancing were shown to form one art. Nothing, says Lucian, requires so great activity of body and mind. The root idea must penetrate the whole man or woman. Steps woven in rhythm and verse go together, and dancers were called *cheirosophi*, or skilled with the hands. Like the modern Italians, they had a mimetic, pantomime language, or art of speaking afar by gesture. Dancing with the feet came first, and hands and arms later. The Greeks were not, like the Orientals, too lazy, or, like the Romans, too dignified to dance. Poets were the first inventors and teachers of dancing, and this art kept its original purity as a high standard of morals prevailed. Homer says that sleep, love, music, and blameless dancing are the sweetest and most perfect of all human joys. To be a good soldier, one must dance, it was said. Primarily in Greece it was a form of worship and a branch of education. Each type of movement had its own dance; the kubistic, with plenty of leaping and acrobatic feats; the spheristic, with rhythmic movements and ball rolling; and the orchestral, or dancing proper, as now understood. Funerals had grave marches and gestures picturing sorrow and the cause of death. Youth performed a warlike dance called *gymnopædia*. The *Pyrrhic* war dances were the fiercest and had four divisions; *podism*, or all kinds of running; *xiphism*, or sham fighting; the *kosmos*, with high leaping, as if over walls and ditches; and the *tetracomos*, a square figure with slow, majestic measure. Scaliger pretended to reproduce the *Pyrrhic* dance in costume before Maximilian I, as did Professor Meibom, with an ancient Greek air, before Queen Christina of Sweden. *Lycurgus* invented the *hormos*, a graceful, lively war dance for youths and maidens, with much competitive exercise in the figure. The crane dance imitated the intricacies of the Cretan labyrinth. Various deities had their own dances.

At the great Delian festival every five years, *Artemis* was first worshipped and then *Apollo*. Delian maidens, with flowers and fes-

tal robes, "danced to joyful choruses around the altars of the two deities, and set forth in sacred ballets the story of the birth of Apollo and Artemis, with the adventures of their mother, Latona. Choruses and hymns followed, regulating the desires." "After sacrifices came a dance in which women imitated the movement of the island, when it was supposed to be tossed by the sea. Then came the winding labyrinthine dances, where the Chorentai were guided in the evolutions of the maze by a design on the floor of the orchestra. While all Greek dancing was founded upon a religious idea, that of the Delian feast was especially sacred," with the same reverent character as that of the Hebrews. The chorus surrounded the altar while the sacrifice was burning and sang airs which simulated the dances, which were often imitative. One depicted the supposed amusements of Apollo's youth; another, scenes from the life of Ajax. Sometimes these festive dances and processions became gross and licentious, as in Elis and the Dorian dances in honor of Artemis Cordax, and those in Perga, which were almost orgies. In almost every religious function of the Greeks, dancing was a part of the ceremony, and thus the deeds of gods were solemnized about altars and statues, while the chorus in the strophe of the hymn turned from east to west; in the antistrophe from west to east; and in the epode, or end of the song, to the front of the altar. Plato says: "There are two really beautiful dances, the martial Pyrrhic and the tragic Emmeleia," named from a follower of Dionysos, and this all philosophers praised. The Dionysiac or Bacchic festivals were entirely composed of the three dramatic dances—the Emmeleia, Kordax, and the Sikinnis—tragic, comic, and satyric. The movements of the chorus, made up often of old men and matrons, were slow, with minuet step. The liveliest dances were those of the tragic chorus, when a joyful surprise or a new hope was expressed. The choragus, or coryphæus, sang a solo, while the chorus executed rhythmic movements. Thus the maiden chorus in the "Seven against Thebes" danced a fervid song in the hope that the protecting gods would give aid. Euripides composed a solo dance for Jocasta's joy on seeing her son again, and in the Orestes dances, Electra dances in mad pain when all hope is lost. In the Eumenides there were fifty furies in the chorus, and their wild rush into the orchestra, with terrifying gestures and masks, so frightened the women and children that their number was limited by law in those colonies where women were admitted to the theater. In the Antigone the chorus plans to dance all night before the temples. These dancers required the greatest versatility of mind and sympathy with nature to produce the marvelous effects upon the audiences with which they are credited.

With all its splendid accompaniment of song, music, dress, and scenery; with, in its best age, decorum and high moral tendency, we cannot wonder that Timocrates exclaimed, upon first seeing a theatrical dance, "What exquisite enjoyment is this which I have so

being sacrificed to the false pride of philosophy!" In the dramatic dances, with its standard of beauty and proportion, are found the germs of the pantomime and of the more modern ballet. The lyric drama of the days of Æschylus arose out of the dithyrambic hymns sung at sacred festivals, at first extemporized under the effect of the grape, and then toned down to a trained chorus. Its simplest form was a circular dance by a band of choristers around the statue or altar of a god, and out of this Attic tragedy bloomed into its luxuriance of verbal melody. Again, there were flower dances and others in imitation of various animals, representing the flapping of wings with garments wound about arms and hands; a bear dance to Artemis by young girls in saffron; an owl dance, shading the eyes and turning the head to and fro. The Hyporchema was one of the most ancient and belonged first to the cult of Apollo. The most beautiful Spartan dance, the Caryatis, was performed annually by the richest girls in Sparta with flat baskets on their heads, containing the sacred cake, chaplet, incense, and knife to slay the victim. These women probably formed the model of the Caryatides in architecture. In Crete perhaps some of these dances are yet preserved. The priests of Cybele had a martial dance, beating their shields to drown the cries of the ancient Zeus, that his father, Kronos, might not eat him. The Arnaut and Wallachian dances are perhaps the same. The Ionian was a duet, danced quietly and lightly after a banquet. In May the dancers are covered with flowers in honor of Flora, and their song is a welcome to her. Thus ancient Greece danced to develop health, courage for battle, and a devotional spirit.¹

In ancient times the dignified Romans danced but little. The priests, called Salii, danced to the honor of Mars in their ritual, and from this sprang nearly all the Roman dances. Three hundred and ninety years after its foundation, to divert the people and propitiate the plague, the Ludion dance was invented. In May Roman youths and maids danced in the fields, gathered boughs, and adorned houses. The funeral dances of Athens were introduced, and the chief per-

¹ M. A. Hincks (*The Dance and the Plastic Arts in Ancient Greece. Nineteenth Century and After.* 1907. Vol. 61, pp. 477-489) says sculpture, vase painting, and every aspect of Greek life was influenced by dancing, which was perhaps the most potent formative power of ancient art. They really held that the beautiful is greater than the good because it includes it. Probably the dance did originate with Eros and remained long associated with him, its pantomime and rhythmic and harmonious activities being promoted by the love of God. In a sense we have to worship the Greek gods to believe in their myths or to understand their art, for the dances died with the deities. The dance "best expresses the religious feeling and enthusiasm of the Greeks." "It was the constant glorification and veneration of the human body"; it was expressive gesture with music and poetry highly elucidative. If every new movement destroyed the harmony in the dance, the next created another more beautiful. We have to go deep with Pythagoras into the principle of rhythm, harmony, and number to understand it all.



former, the archmime, personified the dead, or, more often, portrayed his chief acts with absolute justice, wearing a mask like the face of the dead one. Although dull and severe dancing was almost as old as Rome itself, it was fully developed and introduced into the theater only in the days of Augustus, where pantomime reached an incredible degree of perfection and there were three thousand foreign women dancers in Rome, who were retained when the expense of foreign teachers of philosophy and of other scholars was cut down. The feet were eloquent; a language of the hands was moving; and gesture speech was even richer than in South Italy now, and as useful in communicating with aliens as an interpreter. Whole plays were performed by gestures and steps alone. Every well-bred man and woman practiced dancing, until Seneca called the fashion a disease; but the dignity of movement and carriage of both sexes, and even the eloquence of orators, was aided by it, and the Romans were more sensitive than any had ever been before to the charms of a noble gait. Cicero was vexed because it was said that Roscius's gestures were as eloquent as his own words. In later times dancing grew licentious, and Cato thought it horrible to twist the body thus.

It is hard for us to recognize that the twinkling-footed celerity of dancing was originally a religious service. St. Basil recommended the faithful to practice dancing as much as possible on earth, because that would be their chief occupation as angels in heaven. In the apocryphal romance, entitled the Acts of John, that Apostle is made to say that after the Last Supper our Lord called upon his disciples to join hands and dance around him while a hymn was sung. Gregory declares that Paul thought the dance useful in religious services. The early Christians had to keep their services silent in catacombs and private halls, and this increased dancing. The first bishops, called *Præsuls*, led the sacred dance around the altar in the raised choir on feast days and Sundays. Each feast day had its appropriate hymn and dance, and there were dances before the tombs of the martyrs. Church dances were never mixed, but each sex had its own chorus. Church and graveyard dancing was forbidden by the Council of 692, but in the thirteenth century was introduced again into the sanctuary with miracle plays representing Bible scenes. These were forbidden by the Bishop of Cologne in 1617, but church dancing seems to have been unforbidden for five or six centuries, and the prohibition of it did not affect dignified and graceful movements, and at the end of each psalm, instead of the *Gloria Patri*, the saint was invoked to pray for the worshipers and they promised to dance for him. In the day of the Nuremberg Chronicle, in 1493, dancing became a passion among all classes, although the dancing mania did not become endemic till 1374, when there were an enormous number affected by St. Vitus's dance. In honor of the English saint, Willibrod (690), dancing processions were instituted, and in 1892 fourteen thousand people made pil-

grimaces to his shrine at Echternach. Up to the seventeenth century dancing was often obligatory as a feudal hansom, or a required act of servitude or tribute of gratitude. The pilgrim march, which was forward two steps and back one; the Jumping Saints, who maintained this step even up the high steps of the church and before the altar, are inspired by the devotional spirit. At Seville dances are performed before the Holy Sacrament and on two feast days. This dance belongs to the Musarabic rite, and its beautiful music cannot be printed. It is often with castanets; the clergy kneel, and the congregation are greatly impressed.

The same feeling that moves a Spaniard to dance a jota before a corpse, if it be that of a young person saved, perhaps, from a life of trouble and sin, prompts the women of Northern India to sing and dance joyfully on the death of a man of great age. Dances at Irish wakes; the Flanders custom of taking the winding sheet and moving it in rhythmic fashion to song, which is very old; the dances of the Abyssinian Church, supposed to be Davidic; the whirling of the dervishes to parody the movement of the heavenly bodies; the wild revels on Walpurgis Night, where imps whirl to uncanny music played on catgut stretched over horses' skulls in honor of a saintly English nun; the fire dance on the Eve of St. John; the pure light-heartedness of the old English dances in the day of Sir Roger de Coverly, until Puritanism called the way to heaven too narrow for men to dance in—all this illustrates the most plastic uses of the dance and how it can express every human sentiment, and is at once a language of the muscles, will, and heart.

Very interesting is O'Neill's¹ discussion of dancing, which he thinks was originally circular worship and abounding in wheel symbols. Dancing, according to Schopenhauer, is the apex of physiological irritability, and makes animals most vividly conscious of their existence and most exultant in exhibiting it. In the most ancient times China had ritualized it in the spring, in which consisted a large part of the education of boys from thirteen on. It has long been a religious function in Japan, where dancers are almost a caste. The old Roman *Sali* were a priestly college. The worship of Mars had its dancing cult. So did the whirling dervishes. The dance of the stars was an old and well elaborated classic idea.

Savage dances express their character, and some races have special dances for every day of the year and almost every occasion, and could hardly live a week without dances. This is seen, too, in all nations in their infancy. Primitive people often dance for their own amusement and pronounce it "hard but nice." Most dances, thought to be secular among savages, were at first religious or magical. The buffalo, snake, bear, kangaroo, eagle, elk, and other animal and perhaps totemic dances may be to imitate prey, insure

¹ O'Neill, John, *Night of the Gods*. Quaritch and Nutt, London, 1893-97, 2 vols., vol. II, chapter III.

abundant game, or they are forms of rejoicing over a successful hunt. Perhaps they express regret at the slaughter of their victim, so that it is sometimes a purification ceremony. Some war dances are essentially schools of tactics, and in their frantic exaltation the fictitious character of the exercise is sometimes forgotten and friends are killed. Men often dance till they fall exhausted. Sometimes they dance to propitiate the ghosts of slain enemies; paint themselves black and sing dirges addressed to the souls they have disembodied; so that love, hunt, war, and exorcism are all expressed, while foaming at the mouth provokes inspiration and prophecy. Some have not only death dances but resurrection dances, where they hide or fall rigid for a time and then leap up in joy. Many dances are for the healing of diseases by medicine men, and sometimes the ailment is parodied, as in the Tarantella and Tigrityia. The hideous noise and bustle about the bed of a man about to die are to keep him from sleeping, which is akin to temporary death. Besides incantations, dances reveal mysteries which cannot be told, but only danced out. Devil dancers, with their bull roarers, frighten off evil spirits, and in ancient times were perhaps connected with human sacrifices and cannibalism. The Lamas in their devil dances represent wrestling matches between saints and demons. The Moquis paint their ribs with white pipe clay to look like skeletons. In Brazil the bones are dug up at midnight and dances are performed about them. Dancing masks and costumes are elaborate and exactly prescribed and often very gorgeous. Sometimes their ritual is so exact and solemn that he who makes a mistake is killed on the spot. Friendly contests in dancing are very common, and in Australia perhaps the most elaborate of all are the initiation dances at adolescence. The solstices are often thus celebrated and tribal enmities perhaps suspended. In a Zuni sun dance four thousand men and women took part, and mutilations and sufferings were sometimes horrible. In some, the men are wonderfully gotten up to stimulate sexual selection by the women. In Dahomey the king performs a *pas seul* in honor of a distinguished guest. The Corroboree is essentially a very elaborate dance, part of which is usually by moonlight.

Few understand what pedagogical gems the best folk-dances are or with what condensed meanings they are freighted. They are not merely wholesome exercises or amusements, but moral, social, and æsthetic forces, condensed expressions of ancestral and racial traits. Like many of the figures in design which characterize the art of the ethnic varieties of mankind, they are often concentrated, acted narratives of epoch-making events which persist after all specific memory of their meaning has been forgotten. They are story-roots ages old that connect

modern man with the times, facts, and heroes that made his nation and shaped his character. They once went with song, and though the latter is often lost, its spirit and significance survive. Thus they may be residual, quintessential history told in an adumbrated form in action. Many, again, depict national traits. The Scotch reel, e. g., says Gulick, represents the caninness of the Scot. It is gymnastically economic, with carefully regulated joy and definite consideration in advance of each step. Russian dances are marked by great flexion and extension of the whole body as if crouching to share the vitality of the earth and then springing erect as high into the air as possible with the head thrown back as if throwing off all repression in an upward aspiration and involving lavish expenditure of energy. The Hungarian czardas advanced from slow to very rapid and passionately intense movements, a process representing the diathesis of this race. Italian dances abound in vivacity, lightness, grace, etc.¹

The origin of these dances can no more be traced than can that of folk music or myth, but they grew up very slowly through centuries and perhaps millennia, until they have come to fit and express the very soul of the people, embodying its memories, expressing its psychophysis traits, aspirations, etc. Thus folk dances are marvelous embodiments of the ethical, religious, and in general the temperament of peoples. It is such action rituals that shape as well as utter the very psychic types of the people who developed and were developed by them. If thinking is evolved out of actions needful for survival, it is such activities as these that contribute to the very temper and tempo of thought and thus do very much for sane and effective thinking by laying down its neural bases. Hence they give to the individual wholesome feelings and ideas, and weld him to his race, place him in the proper setting to it, endow him with his heritage, and thus integrate him with it.

In the desire to revive some of the many decaying pastimes of Merry Old England (as described in Brand's "Antiquities") two countrymen were found, a few years ago, who knew the Morris dances and songs by direct tradition from old days.

¹ See Dr. L. H. Gulick, Folk and National Dances. Proceedings of the Second Annual Playground Congress, 1908.

They were with difficulty persuaded to come to London and taught both the songs and steps to a group of comely working girls. The latter proved apt pupils and taught them to still wider circles. Soon popular attention was attracted and not only among the poor but in rich aristocratic circles these girls were in great demand as both performers and teachers, until their time was all employed thus, and in fashionable parlors and lawns Morris dances became a very popular diversion; and this movement may yet take its place beside the arts and crafts revivals of the old industries of the guilds as another instance of psychogenetic recrudescence in the folk soul. Until we know more of its laws we cannot explain resurgences like these.

It is such precious treasures of which this unhistoric country, a pudding stone of many nationalities, has been atrociously unmindful until lately, despite the fact that the majority of the population in most of our large cities is of foreign parentage or children of parents born abroad. Most who come to our shores soon leave behind them all such rich possessions, hence the recent attempt to revive festivals, pageants and dances has brought with it as one of its astonishing results, to those ignorant of the significance of these forms, a genuine revival of racial spirit and self-respect. The significance of this movement we are, indeed, hardly able as yet to estimate, for its possibilities are still undeveloped. The members of these various racial communities in our midst have by this means come to feel their own solidarity, to revere their own past, to feel that they have something of worth to contribute to us, and so while their loyalty to their father- or mother-land has been increased as they have reestablished connections with its traditions, not only has greater continuity come into their own lives which has made them of more value, but their allegiance to the country of their adoption has been increased. Our national life, which was so poor in festive spirits and forms, has thereby been enriched. These revivals of folk customs, due to the production of folk dances here, have thus knit the ties that bind race to race and given newcomers more courage to maintain and enforce in their offspring other good customs and moral sanctions which they brought here but which were being abandoned to the detriment of both parents

and children. It has done much to make us feel that we must devise more rational methods of celebrating our own national holidays, which till lately have been allowed to degenerate often to rowdyism and to pleasures both dangerous and vicious and which it is high time should be utilized for pedagogic and patriotic purposes.

The dancing here advocated has little to do with the ball-room and finds little more to praise and little less to condemn in it than do Puritan religionists, though on different grounds. The offenses of these dances have usually been against hygiene, involving as they did unreasonable hours, fatigue, excitement, exposure, and often, too, against morality. The types of movement are chiefly confined to the limbs, respiration is restricted and especially facial movements and expressions are so tabooed that the physiognomy often seems sad and wooden, while the steps are conventionalized so that their athletic value is limited; they usually engage chiefly the young and unmarried, so that their attraction is too predominantly intersexual, however refined and safeguarded they are by prim proprieties. These dances are thus attenuated with hardly any suggestions of the possibilities that have been and now seem again likely to be realized.

One origin of dancing is work. Many ancient industries which involved striking, pulling, lifting, were concerted and oscillatory like the "ye-ho" of the sailors when raising an anchor or tightening a sail, and were attended by crude songs for tempo, whence arose the old work canticles, of which many have been recently rescued from oblivion by scholars, and they constitute a valuable missing link in the evolution of woven steps and poses. In this element the dance harks back to occupations of primitive people. In this field pedagogic genius is now achieving one of its brilliant triumphs in devising imitative action songs that initiate young children into many a human avocation by gesture and song. They sow seed, plant, tend and reap the harvest crops, bind, thresh, and grind corn, weave, braid, hammer, chop, mow, milk, churn, sew, wash and iron, march and fight, build and cobble, row and sail, hunt and fish, dig and lift, throw, shoot, paint, hew and plane, act weddings, play games, ride horses, keep school, tend babies, and sometimes act out church services, funerals, etc. These mo-

tor mimeses not only give a vast variety of exercises for face and voice, and circulation of the muscles, but what is far better, they implant early a deep, all-sided sympathy for labor and the high arts of human life which makes the best possible basis for an education which is truly liberal if, as we are now learning, industry is the law of culture. Thus the child participates in the activities of the early savage stages of life.

Again, many represent nature life in pantomime. Children learn to fly like birds, swim like fish, strut like the peacock, buzz like the bee, croak and hop like the frog, climb like the bear, and act the part and make the noises of scores of creatures known and unknown, wild and domestic.¹ Thus the child often gets high pleasure and participates in the life of plants, flowers, and trees, and feels more keenly the power of the rocks, mountains, sea, sun, moon, storm, morning, evening, and thus restores in and for itself in its nascent hours, the now too often lost appreciation of nature, every item of which has sometime and somewhere been an object of worship, and lay deep and betimes a basis of the love of the world, of man, and of God. The importance of cadenced movements as organs, first of interest, and later of knowledge which psychogenetic students are now revealing is very great. Here again the child is becoming a key to unlock the secrets of the stages in the development of the race, and vice versa, racial history sheds light upon individual development.

Another source of dancing is pure play. The capering and prancing exuberance of animal spirits, the fund of superfluous vitality, is the purest joy in the world, far beyond that which sense, wealth, and fame can give. This source of dancing is most unformed. Even trifling delights make children and primitives leap and shout as if drunk with joy; so, too, pain and grief have their motor utterances, if yet more crude and unritualized. There are dances of pity, anger, fear, jealousy, and most of all of love, so that every cardinal emotion is thus shown forth and may thus be strengthened and purified or degraded and repressed by this complex quality.

As we have seen, the history of dancing shows that for most races, and in most ages, the religious motive predomi-

¹ See chap. I, p. 25.

nates. For about every known savage tribe their religion, which generally forms a far larger part of their life than does ours, has dances as its chief forms of service. To them these are holy passion plays as sacred as the communion service to Christians. The dreaded "ghost dance" of our Indians is pathetic devotion to the souls of all the great dead of the tribe with which they commune. There are dances to the buffalo, snake, eagle, sun, moon, crocodile, trees, corn, rice, and other crops; dances for rain and everything essential to the life of the tribe even with the elements of prayer and totemism strangely and inexplicably mixed. There are dances for men, women, children, and slaves; for the celebration of birth, marriage, death; to commemorate anniversaries, war, disease, pestilence, drouth and famine, in all of which the souls of the corybantes commune with gods, the souls of ancestors, or spirits that bless or curse. To learn a new religion they must learn its dances and its processions, rituals, forms, and postures. Savage devotees often dance themselves into a frenzy and when they fall are thought to be in ecstatic communion with the Divine, like the rapt Sybil. Thus the soul rises to communion with both the dead and the gods in vision and is thought to be converted or to attain immortality. Many of these dances are thought to illustrate "the other world" conduct. Heaven, says an Eastern poet, is "one long mystic dance, with the stars sweeping ever on with cadenced action to the music of the orbs of light."

Perhaps next to the dances of religion come those of love, in its loftiest and also in its grossest and most animal forms. Between its extremes, dances of phallic mysteries, and the love that scorns death and is fixed on the good, beautiful and the true, what a range! If love dances degrade, they can also exalt and purify as well as long-circuit passion and vicariate for its bestialism as few other things can do. The cake-walk is perhaps the closest human analogy to the showing off or balzing and other forms of animal courtship that are so potent in sexual selection. By pantomimic dances also the stages and forms of falling in love, of coyness, unconscious inclination, progressive fascination and final conquest, can be set forth in symbolic and typical gestures more expressive and truer to life than the words of romance or poetry can ever be. Here, too,

etiquette and convention are almost as important as they are in worship. For no other class of dance are both sexes necessary, for under this form most social dances fall although they constitute altogether a very small portion of and are on the whole far from showing ideal situations and relations between swains and maidens. These can be made both alteratives and vents rather than stimulators of passion.

Then come war dances, from those of savages to the Pyrrhic and Martian, of which marching and military evolutions have preserved something of the old spirit, as we see in the way in which the fife and drum bring a flush of heroism and courage even to dastard hearts. In these ways we find these four—industry, religion, love, and war, playing upon our muscles in idealized situations and preforming the soul by determining how it will act when these passions are at their acme.

Another great role of dancing is, as we have seen, acting out history, and mythology, setting forth the records of the past with maximal insistence at every point on the motor elements with the best elocutionary and dramatic accompaniments. Thus we not only fix in memory but vitalize by bringing home to the heart and life great personages and events, so that we have here a new way of teaching history. Festivities and celebrations rehearse events in condensed and symbolic form until they stand out as real and are etched into the soul not only of the actors, but of the spectators. Thus early archives are written not in letters but in the language of these motion pictures; not laid away to mold but kept fresh and transmitted by periodic rehearsal; and thus not only the dead but mythical personages and imaginary events work their culture effects. In these ways muscles vitalize the past for the young and here despite much crudity and error we are probably beginning a new and interesting line of festal presentations destined to place a very important but lost instrument in the hands of the pedagogue.

In this broad humanistic sense dancing had become almost a lost art. Its traces, of course, inevitably tend to vanish unless it is assiduously practiced because, despite the ancient and still more modern attempts at graphic record, we have still no effective mode of preserving these save oral tradition. The

exact form of every ancient dance is lost and our knowledge of them is largely put together from incidental descriptions and from art representations of postures and poses. The great Mysteries were chiefly celebrated by their aid in all the countries about the Mediterranean which were commemorated centuries before Christ and in the gradual reinterpretation of which we are coming to realize that regeneration and Eucharistic beliefs and practices instituted by Christianity were sacred and inviolable secrets which no celebrant might reveal. No other art, therefore, is so fugitive, so difficult to represent by any method of notation, and hence its most significant and widespread forms have sunk to oblivion, but the instinct remains in every thoroughly vitalized soul.

Among the signs of revival are a new sense of the charm and infection of dancing. A large proportion of average modern men are not physically overworked, for machines, sitting, and indoor life have relieved them of drudgery and hence doubtless increased the tendency to physical spontaneity. Among our data are the confessions of many mature people who feel impelled to expose themselves to the provocative of "kicky" music, some of whom pull down the curtains at home and dance in a way that would doubtless make a master of the art groan, to all sorts of music, from classic and sacred to the latest popular song or twostep. The pianola has contributed somewhat to this revival and many have found it a wholesome and refreshing exercise, rivaling golf, bicycling, boating, or at least a pleasant variant from these. This kind of dancing is from its very nature *le pas seul* and every step is an individual creation made on the spot.

Again, gymnastics are becoming aesthetic, and mere acrobatics and physical culture for their own sake, if not drifting danceward, are used as setting-up exercises and as correlative. In colleges, normal schools, etc., this higher dancing is now taught, often under a number of euphonistic names, as calisthenics, etc., and on the wall of one room I have seen a motto, "Motion for emotion." Younger high school girls have decidedly greater aptitude, need, and liking for this than boys.

I lately saw some scores of country female teachers at a summer school, clad in proper loose dress with short skirts, beginning these exercises; and a stiffer, more conscious group could hardly

be found. To move the limbs sideways, front, and back, lift the feet three inches from the floor, seemed so hard for body and mind as to be almost cruel. At the end of six weeks I saw them again, and while by no means accomplished in the art, the gain in form, grace, and harmony of movement was amazing. Limbs, trunk, arms, neck, now moved as if not on rusty hinges but on newly oiled joints, and nearly all followed the course to the end, sometimes at the expense of other courses. Interest grew and the faces had lost the rather stolid, sodden look, and many of them actually beamed as the hour progressed with the joy of life, and some showed a most wholesome abandon to it. At any rate, this class hour was the happiest of all to those not too euphorious lives. So in many a Y. M. C. A. gymnasium, in very many parks and playgrounds, roof and pier gardens, sand yards, and not a few church basements, dancing under various names is taught, and everywhere with great interest and excellent results. A clerical trustee of a church girls' school, having heard the pupils were taught to dance, preached vehemently against it, but later, seeing the same system in operation elsewhere and told it was rhythmic physical culture, he became first interested, then enthusiastic, and finally took private lessons himself.

In one girls' college I lately saw an afternoon festival with a charming background of hill, water, and wood, in which a hundred seniors rehearsed with costumes, poses, and mystical music how Pan got a soul from Syrinx; and the oreads, or mountain nymphs, first appeared in gray; hamadryads, spirits of the oaks, in delicate green, sought their trees, the naiads of the water, in iridescent drapery, played with the fountain. Pan and his troop of Fauns, in dull red, danced very eloquently. Syrinx's nymphs, in white, were joyous with flower garlands. These evolutions and the artistic scene of the action of the story gave a set of sensations which I fancy quite new to the modern world since ancient Greece. It was music in motion, with endless suggestions, but, like everything of this sort, utterly indescribable save to one who has seen it. The culture effect, too, of imparting interest for all that is suggested by the pregnant word Greek, although it cannot yet be fathomed by psychology, is a valuable and assured thing. In this institution the course of instruction is calendared "natural dancing," as it should be.

Thus we already see that dancing covers a very wide field. Perhaps it begins with the earliest sense of rhythm which some observers of infancy find when, delicately patting the mouth of a cooing baby, they find its attention singularly arrested and charmed. It at any rate expands all the way from periodic scansion, intonations, college yells, vestments, up to the sentence sense, which cadences and sets pace to thought and gives to it a body and control, preforming style, manners, enriching

emotional life, putting in touch with the past, as one of the best organs of recapitulation of the life of the race by the individual, limbering overworked sinews and muscles, and giving nerve to flabby city children, whether pampered or neglected. Thus home, church, school, are winning back what they had been too ready to give over to the devil.

All psychic changes are expressed in motion, and among all movements of the human body there came at a certain stage of evolution one group of movements, viz., those of lungs, throat, and larynx, which perhaps quite unexpectedly produced noises. These movements were originally no more addressed to the ear than any other form of activity. Thus out of automatisms and reflexes language slowly evolved as man became more and more social and as need of concurrent activity and of pooling on perceptions of one for the benefit of the community increased. The intricate expressive movements which were its matrix, after having accompanied it with great profusion of movements during its early stages, tended to decline as it became effective because they were no longer necessary and involved waste and energy. Man to-day has little conception of what gesture means and can do. Every single movement and pose of the body has meaning. We have alluring glimpses of this original language common to all men in pantomime and in the more conventional forms of it in the various sign languages that have been developed.¹ Changes of pitch and tempo are in a sense a dancing accompaniment to words and the thoughts they express. This only needs more elaborate gesticulation to become eloquence and choric orchestration in the broad Greek sense, for this was the origin of both song and drama. Perhaps music was first to sweeten words; and dancing was a motor, and song an auditory, accompaniment of speech. Thus, if thought is repressed action, dancing is thought expressed by the movement in which it originated; and so, again, a part of its pleasure is reversionary. But in English, and especially in this country, our speech has dropped everything not necessary for conveying meaning. It is only the savage who talks with his whole body, or the Ital-

¹ See Wundt, W. M., *Völkerpsychologie*. Bd. I. Engelmann, Leipzig, 1900. See also W. P. Clark, *Indian sign language*. Hamersly, Philadelphia, 1884, 443 p.

ian laborer, who cannot do manual work and talk at the same time because gestures are so essential and habitual. The English language is thus more remote than any other from this primitive condition. Indeed, our very printers' fonts contain more e's than any other vowel, and this is the thinnest and farthest front in the mouth, requiring the least effort, while the consonants, especially labials and dentals, make up the great body of our speech. This involves gain, but also loss, both vocal and muscular, and probably tends to mental desiccation and decay. Now it is this tendency against which one of the best influences of dancing in the old sense of the word is directed, and which it tends in no small degree to overcome. Why should our thin superficial speech, which is made still more unnatural by writing and reading where the auditory element is eliminated, be improved? Here we stand before a great question, the answer to which in very concise terms runs along the following lines. Speech that is now slowly approximating a mere whisper, is not so genuine and hearty an expression of psychic activity as a language that involves all the motor possibilities and combinations of the body. Our attenuated utterances play over the surface of the soul, as it were; are less deep and honest, although perhaps more subtle. Even lying is easier when it involves a slight articulatory element than when it involved widespread and forcible innovation made up of both automatic and voluntary elements. Again, such speech is further removed from action and even conduct than primitive language could possibly be, and hence more readily lends itself to casuistry, evasion, and perversion of truth. It is such language that is most often used to conceal reality, and it certainly does not favor the type of character that is straightforward, simple, forcible, and decided. Mere talkiness is a more easily manageable vehicle of prevarication even than mere acting, although it is indefinitely harder to act out a lie than to speak one. Language, therefore, in its modern types, tends to produce a degenerated psychosis of gossip; chatter and most talk does not vent or reveal the depths of the soul, but only ephemeral shadows that flit over its surface. It is this evil, which has many far-reaching consequences for the health and robustness of the soul quite as much as of the body, that the ideal dancing teacher seeks to correct. The

ideal purpose of instruction in this domain is to strengthen utterance, to make it more hearty and deep by restoring the motor elements that have degenerated, and to enable man once more to talk with his whole organism, and thereby to bring about a new and wholesome unity of action between the soul and the body. That this would make for moral efficiency, for transparency of life, and will reduce the element of deceit and distrust, there can be no doubt. To affirm and deny now involve a momentum and carry a degree of conviction impossible before. It is the action of the orator that sways all before him. Thus, rehearsing and enriching the old motor activities of the race in dancing form and making them a better expression of feeling and of reactions to experience, we may help to restore the lost motor accompaniments of thought itself, now stripped of so much of its pristine vigor and reduced chiefly, as many researches recently summarized by De Sanctis show, to the changing tension of from one to three muscles of the forehead. Thus it has lost intensity and vividness while gaining in range and abstraction. These exercises will tend to make thinking natural, sane, and vigorous, instead of the faint motor expressions of thought seen in muscle reading, and which are only attenuated relics of the more vivid and intense psychic states and processes from which modern thinking has shrunk. True dancing sets it again in scene as the mother lye restores defaced crystals. This also cannot fail to increase honesty, frankness, openness, and to make concealment and hypocrisy harder for the muscular system as a whole to lie than for words to do so. Bastian urges that we must conserve and, where possible, restore the fresh first thoughts of primitive mankind, and rhythmical training of the body aids in doing so.

As to the function of dancing as an organ of understanding and feeling music, I believe it is not going too far to urge that no music of any kind is or can be fully comprehended without motor accompaniment. If a player or singer understands music because he is performing it better than the mere passive listener, when to both it is new, do not cadenced steps, poses, and movements also help to deeper appreciation? Music always means motion, or at least posture. We see this in catchy marches with strongly accentuated rhythm, not to speak

of music that is descriptive of waves, winds, and storm, but I maintain that all true music prompts us to act it out. A motor-minded genius occasionally appears who interprets music to others thus. Rapid listening is only one and a psychologically very small element in man's natural response to it. We really feel and know music in the muscles, and its phrases are rightly called motives. Thus in a modern concert we only enjoy music in a lazy, decadent way, and, if the future is to be more virile, both composers as well as hearers will be benefited by the new interpretation of it as efferent poetry. This, too, is a larger interpretation of dancing. Much national music is simply based upon national dances, and can only be imperfectly understood when these dances have become obsolete. Thus to revive such dances, or to create others from the music, is necessary for the completion of the latter.

Thus, again, the wondrous charm of dancing is due to the fact that when unconstrained and free these movements still really express those activities in which our forebears uttered most of the energies of their bodies and their souls. It restores ancient body habits dwindled to rudiments in the forms of modern industries which lay stress only on special activities, for dancing is generic. It not only strengthens the muscles, but gives us more control over them.

Gesture, Pantomime, and Mimesis.—Gestures are movements addressed to the eye with the purpose of communication. They constitute sign language, and sematology is the systematic knowledge we have of them. They are written in the air, and despite many attempts have had as yet no adequate notation, and, till the kinoscope, could not be recorded, for verbal descriptions of them are cumbrous, partial, and often ambiguous. Loss of the power to understand them, *asemia*, is almost as basal as *apraxia*, and involves more fundamental neuro-psyche lesion than do the *aphasias*. They may be limited to the face or hand or even to parts of them, or may involve nearly all the voluntary muscles. Gestures have attained a high degree of development among the Indians of the United States because the population has been sparse; there were fifty-five radically different linguistic stocks unintelligible to each other, and intertribal must constantly supplement intratribal communication. Hunting, too, favors si-

lence and signs.¹ On the prairies and on the west coast, where languages are most diverse, the Chinook jargon arose, as did pigeon English in China; such mongrel species of language need to be supplemented by florid gesticulation. Among the Cistercian monks, with their vow of silence, a highly arbitrary and artificial system was evolved. Deaf mutes, too, not only tend to develop signs, but learn them so readily that those who insist on the articulation method, as do the Germans and most Americans as opposed to the French scheme of developing natural signs which enables them better to communicate with each other but less with normal people, find it very hard to repress this instinctive mode of conveying meaning.² Gestures are favored by secrecy, and the Sicilian Vespers were said to have been planned without writing or vocalization; and the subjects of Dionysius, the tyrant of ancient Syracuse, resorted to them when speech was forbidden. Operators in factories, amidst the noise of machinery, have become to some degree histrionic adepts. Lively feelings, a vivid imagination, and great vitality predispose to this primitive mode of utterance, and civilization is often said to reduce this ancient seasoning and coloration of speech. Sittl³ has shown in great detail how highly it was developed in classical antiquity as an integral part of religious and other festive dances which were often very pantomimic on the stage, with three gestural systems—cordax for comedy, emilia for tragedy, and sicinis for satire—partly because the audience was so large and masks precluded facial mimesis and modified vocalization. Canon de Jorio, in a great work⁴ with many pictorial illustrations, has shown how in the Neapolitans the gestures of ancient Rome not only survived, but became still more developed as expressions of a vivacious diathesis which so predis-

¹ See the voluminous and illustrated collection of these in Garrick Mallery's *Sign Language among North American Indians*. Annual Report of the Bureau of Ethnology, 1879-80, pp. 269-552.

² See J. Heidsieck, *Der Taubstumme und seine Sprache*. Woywod, Breslau, 1889. 318 p. See, also, *Annals of Deaf Mutes*. Washington, 1875, and *Reports of the Hartford Institute for Deaf Mutes*, where the natural signs were long used.

³ Sittl, Karl, *Die Gebärden der Griechen und Römer*. Teubner, Leipzig, 1890, 386 p.

⁴ Jorio, Andrea di, *La Mimica degli Antichi investigata nel gestire Napoletano*. Napoli, 1832, 380 p.

poses to it that the rower drops his oar and the day laborer his tool to answer, and, in the dark, speech seems almost tame and bloodless. This he ascribes in part to an exceptional innate liveliness of temperament and objective modes of thought and life aided by the momentum of both tradition and heredity. Austin¹ has shown how the orators of ancient and modern times made their art action, and many more recent rhetoricians have classified the position and movements of hands, arms, feet, legs, face, and the entire body, and would emphasize nearly every line of public address by graphic and vehement activities to enhance the effectiveness of their words. Many a writer from Engel to Piderit,² to say nothing of rhetorical and dramatic schools from Hlenischius to Delsarte, have striven to conserve or restore the old, deep-seated instinct, believing that vivid and intense sentiment of conviction of truth which the world desires and also the complete dramatic illusion of reality could be both felt by the speaker and conveyed to others best by talking not with the tiny muscles involved in articulation, but with nearly all the possibilities of voluntary motion.

These are the influences that have favored the survival and development of gesture or prevented it from lapsing toward the position of a lost art, but they have also resulted in the addition of many artificial and conventional signs often very hard to distinguish from those which are most immediate and natural. Some gestures consist of tracing outlines or drawing in the air, and, if recorded, would be very like some of the pictographs of Egypt or the script of old Mexico, for some of their characters seem only written gesture. Gesture has some points of very vital contact with plastic art and with heraldry, and shades into primitive modes of dancing by imperceptible gradations. Some gestures are instinctive and universal among all people, and others, like, e. g., the manual alphabet of the deaf mutes, are deliberate inventions. Gestures are often classified, by none more rigidly than by Wundt,³

¹ Gilbert Austin: *Chironomia*. Cadell, London, 1806, 583 p.

² Piderit, Theodor, *La mimique et la physiognomonie*. Baillière, Paris, 1838, 280 p.

³ Wundt, W. M., *Völkerpsychologie*. Die Sprache. I. Theil. I Bd. Engelmann, Leipzig, 1900, pp. 131-243.

who makes them to be referential, imitative, codesignative, and symbolic, and even describes their very etymology and syntax to all such rubrics and categories, which, while helpful to the novice in this field of study, are inadequate, and seem first artificial and then encumbrances as he proceeds. Social forms and ceremonies often involve gestures, and these tend to become stereotyped, and then outgrown and thrown off by exuviation like fashions. Instead of prostrating and kowtowing, we bow, scrape, and courtesy; then nod, then wave the hand without lifting it near the head, and, instead of embracing and kissing, we touch finger tips. For Spencer,¹ gestures are motor discharges of the same kind but of less intensity than the movements which once satisfied the feeling that caused them. Out of a vast profusion the fittest are slowly selected. For Darwin² they are survivals of movements once directly or indirectly useful, if not purposeful, the opposite movements expressing opposite feelings and intensity causing overflow into unaccustomed channels. Gratiolet and Piderit think gesture best explained by reference to imaginary objects of sense. They reproduce either faintly or in an exaggerated way what we should do if the object of experience was present. Hence, their abundance and intensity are as that of our mental images. All these views are not only helpful but true, but each of them only of gestures of a certain type, while others are left quite unexplained by all the theories hitherto proposed.

To understand gestures we must go far back of the conscious purpose of communication and the broad general principle that every psychic act or change is attended by a physical one. Not only are the emotions essentially motive, as the term implies, with concomitant, vascular, cardiac, intestinal, metabolic, and secretive changes such as blushing, pallor, palpitation, relaxation of sphincters, tears, horripilation, nausea, and with modification of all the activities of the involuntary or non-striated muscles, but thought and will also always play upon voluntary muscles, causing changes of tension, and minimal as well as maximal movements. The superciliary and corrugator mus-

¹ Spencer, Herbert, *The Principles of Psychology*. Appleton, New York, 1883, vol. 2, p. 336-366.

² Darwin, C. R., *The Expression of the Emotions in Man and Animals*. Appleton, New York, 1873, p. 340-374.

cles have been called the muscles of thought, and their activity, gestures of intellection; and it is a familiar fact that planchette and so-called mind reading is nothing but muscle reading. Thought would probably be impossible with the most perfect brain if all the egresses were blocked. Efferent processes constantly play not only upon vocal organs, but upon every part and process of the body, and every psychosis has or is its own somatosis. Psychology is at least not yet able to demonstrate the existence of a single sensation that is purely afferent, and that leaves the emissive tracts unaffected, and animal life itself is predominantly, if not essentially, motile, i. e., expressive. From that broad basis a truly genetic doctrine of speech must take its departure. Pure feelings, thoughts, volitions are abstractions, and even sensations are only stimulus directives of outward currents and sensory centers—are only more intimate parts of the objective world, the essence of the soul being the apparatus or function of response which alone can give both reality and actuality to life, inner or outer. With the first animal, the first convulsive movement is also the very ipsissimal essence of the first sense of pain, and the same principle holds of every first feeling or sensation or of every new intensity of either. The first voluptuous experience was the first erection, the first cry, the first discomfort, and there was no content or inner side. The latter evolved slowly after repetitions had left their memory traces on the plastic nerve centers which gradually acquired a degree of independence and later some power of initiative, and this, once a mere subjective accompaniment, still later transmits its effects by heredity, so that in the newborn the primal somatic origin of all feeling states is less pure. This view must not obscure the law that all interior states, however, arise primordially from somatic changes, and the brain, which is the unique organ of registration, can record nothing else than the results of bodily responses. The law that life is response is seen in all studies of instinct and habits of animals which are only organic memories, and even in plant physiology, as is shown by the experiments of Bose. Hence, every movement in the animal world is in a very generalized and fundamental sense the matrix of its own psyche. Real, natural, and instinctive gestures arise out of activities from which they are at least one and perhaps

many degrees removed, for some elements of reality are always wanting.

Greeting is of many kinds. Prostration, kowtowing, salaaming, grovelling, striking the earth with the forehead, offering the neck to be trodden on, kissing the ground—these are attenuated to courtesy with spreading and lifting the skirts, bowing profoundly, often in very elaborate ways, doffing the hat, once as a symbol of freedom, removing the shoes, washing the feet, with special toilets for meeting great personages, and finally the slight nod and wave of the hand toward, but not touching, the head. The embrace has declined to the hand-clasp and shake, or even touching the finger tips, where we have, too, the slang gesture of shaking one's own hand upon seeing an acquaintance, and blowing the kiss. Detailed expressions of joy at meeting fine down to a faint, flitting smile of recognition. These express all degrees of delight at meeting others, from transports of rapture, frisking, and capering, or highly artificial obeisances down to mere recognition, and then pass over into ignoring, cutting, and up the scale of hostile manifestations to personal conflict. There are gestures of abject servility that not only seem to place one's life in the hands of a superior, but actually invite him to take it, but this was succeeded as the world advanced in democratic ideas of equality by an instinct to greet others precisely as cordially as they do us. A part of what is called manners consists of gestures of salutation, and mediates instinctive likes and dislikes on the instant, and courtesy and breeding have no better touchstone. "How much does the new acquaintance like and respect me, and how much shall I show him any return," expresses the subdominant and ancient state of mind. From similar principles arose formulæ of subjection in war: laying down arms, saluting the victor's flag, passing under the yoke, surrendering the sword, kissing the conqueror's feet, embracing his knees, etc. Close akin are many gestures of worship, which consist of voluntary self-humiliation before a divine potentate. Here, again, we have prostration, even with the face in the dust, bowing the head, kneeling, invoking mercy, various gestures of contrition, mourning in sackcloth and ashes, gestures of mortification and even self-mutilation, offering one's self up, etc. Many acts of worship are only gestures of reverence, adoration, self-renunciation. Man slowly ceased to cringe and cower before the gods, and learned to invoke them like the statue of the Greek youth in prayer, erect, with open, upturned face and arms extended in welcome and in petition.

Being strongly motor-minded, I selected and listed a hundred serial motor operations with which I am more or less familiar, such as eating a piece of meat, opening, pouring, and sipping a glass of Apollinaris; opening and using a napkin,

sawing a stick of wood, shuffling and dealing cards, counting bills, sharpening a razor and shaving, striking a match and smoking, dressing and undressing, playing billiards, throwing and catching a ball, writing, taking down, opening, and reading a book; loading and shooting, playing various instruments, rowing, tennis, bowling, shopping, hoeing, washing, wringing, driving a nail, peeling an apple, folding and sealing a letter, making a fire, prying out a stone, spinning and weaving, husking corn, chopping, shoveling, etc., all requiring manipulation, and practiced the movements involved in each process, but only with imaginary objects or implements. At the outset, those before whom I exhibited interpreted my dumb show correctly in every case, and usually with a promptness that surprised me. I was still more astonished, however, to find how clumsy, incorrect, and often halting were my efforts. Where it was convenient to do so, I practiced alternating with real objects or tools, and then without them in pantomime, and found that, while I could thus add many details and greatly increase the fidelity of my mimicry, the latter was still very inaccurate in particulars, and often most so in those most habitual and automatic. By persistent practice some of these motor compositions grew quite elaborate, and the vocabulary of movement items multiplied, and I almost seemed to be handling the real things. It was often difficult to avoid exaggeration; facial and sometimes interjectional accompaniments were hard to repress, despite the unreality of it all. It was a vivid language, and the gymnastics of these performances afforded such a variety of exercises that they seemed to open suggestions for a new hygiene of body and mind. Such active work with the old labor canticles that once accompanied some of them, a few of which are now being restored when set to appropriate songs, as is now sometimes done in the movement games, as we have seen, of the kindergarten, also now receiving much attention, as it did two or three centuries ago in training for the stage dancing and pantomime as well as dramatic schools. This work is highly conducive to unity and harmony of body and soul. There are here both psychological and pedagogical possibilities that should be explored. Such imitative activities, if rightly environed and sanely used in the curriculum of motor education, cannot fail to tend to idealize

labor in the minds of children, and they afford just those rudiments of primitive and even modern industries and occupations as are fitted in the order of growth to give betimes proper insight into and sympathy with these aspects of both toil and play, for both are at the same time recapitulatory and preparatory for a large domain of human life. They give a most wholesome stimulus to the imagination, and also quicken observation. Such abridged, poetized versions of characteristic human activities have underlain most of the many popular festivals of mediæval Europe, in which the processes of physical toil were at the same time made into play and dance and elevated to symbols of man's lordship over nature, while some of them became almost sacraments by association with myths and festive rites.

Many other rites and gestures besides those for general communication express social and personal relations to our fellow men. Negation is shaking of the head, and was very primitive. Thus the child turns from its mother's breast or avoids proffered food. This gesture of refusal or dissent is very widespread, although some races, like the Arabs, toss the head up and back, clicking the tongue to signify breaking off. In all cases, the mouth is turned away, as if the original "no" meant "I will not eat it." This gesture may be accompanied by turning away the whole body and manual gestures of rejection, which make the act of declination more emphatic. Instead of talking face to face in harmony, recusants turn from each other to pursue their own way and will. Yes, expressed by nodding, is a good instance of a contrary meaning uttered by a contrary movement. The bow, or assent, was perhaps originally accepting food by inclining the head to grasp it with lips or jaws. Now it is accepting another's suggestion, and some think the nod is a relic of subordination, as of being second to the originator and propounder of the proposition, and to that extent becoming his follower. So old and widely intelligible are these expressions that stiff-neckedness means inability to bow in agreement or obedience, and I have heard a stubborn man described as prone to shake his head vigorously when alone; but meekness is typified by the head always lowered. There are many gestures of invitation: beckoning with the finger, with palm uppermost, or with the hand, with one or both palms, holding the hands out—all of which mean *come*. But its opposite, repulsion, has far more forms and shades of meaning. Rejection is waving away or pushing off. There is also an upward or forward movement of ejection, or throwing out, and this may be emphasized by many more explicit gestures, even striking and butting and simulated forms of attack, shaking both fists, nodding

obliquely in threat, defiance, with raised chin and perhaps the back of the fingers bent at the knuckles beneath it, and contempt snaps and even twiddle fingers, while the famous *mano cornata* (the index and middle finger extended horizontally toward a person or object, with the thumb and other fingers folded), Jorio says, has in Southern Italy at least twenty distinct meanings, such as *avaunt*, stop, cease, drop it, warding off an evil eye, breaking a charm, spell, or hoodoo, etc.

Pointing and looking designate any object, real or imaginary, in any direction, and at almost any distance, and so does drawing its outline in the air. More commonly, however, some attribute is selected and imitatively suggested. Rain, e. g., is depicted by both hands held high, with wrists and fingers limp and hanging down; water by undulatory movements with the open hand, palm downward; smoke by twirling the forefinger upward as smoke curls; a stone by lifting and throwing movements, and perhaps pointing to or touching the teeth to indicate its hardness; a blaze, candle, or torch by blowing on the erect forefinger; a tent or wigwam by crossing two or more fingers; a tree by holding the hand up, with fingers apart, like branches; grass by some movement with the hand held low, and growth by rhythmical pulsing movements upward; a bird by pecking with thumb and finger together, like a bill; a goat by stroking an imaginary beard; an ass by wagging the hands, each side of the head, like ears, or with two hands together, open, with thumbs for ears and mouth open by drawing down the apposed little fingers, as very many creatures and objects can be represented by hand-made shadowgraphs, in the production of which variety stage experts sometimes attain great proficiency, as was and still is seen in the shadow-play theatres of Europe, as Miss Curtis has described them; an ox or cuckold by a gesture of horns; a ram by that of butting; a horse or riding by two fingers of one hand astride the vertical open palm of the other; a bear by imitating its paw with the hand; a white man by drawing the outline of a stove-pipe hat in the air (Indian) or taking it off (deaf mute); a woman by drawing the finger across the forehead, to indicate her shorter, or cut off stature, or drawing it down the side of the face under the chin to suggest bonnet strings; a baby by dandling the other elbow; the speechlessness of an infant and the toothlessness of an old person by the finger laid across the mouth horizontally or pressed into it; the sun by making a round circle with the thumb and forefinger or both hands; money by a smaller circle with one—all these are samples of standard gestures indicating objects. Colors may be designated by pointing at the lips for red, teeth for white, sky for blue, trees and grass for green.

Another group of gestures signify mental processes, such as the effort to remember, indicated by tapping the forehead; forgetfulness by scowling, turning the head, shaking the hand before the face, or striking the forehead; to think by bowing the head, shading the

eyes with the hand; mental by the act of manual prehension and apperception, or knowing that we know by clasping one closed hand with the other; wisdom or thinking by laying the forefinger on or beside the nose and, conversely, folly is sometimes indicated by placing the little finger there; lightness by laying the two forefingers together; silence or attend by holding up the forefinger and fixating; surprise and incredulity by elevating the brows, protruding the lips, and sucking in the breath audibly; none or nothing by throwing both hands out; number by counting the fingers; many or accumulation by clawing or grasping together with both hands.

Very many moral acts and qualities can be designated by gesture, such as lying, by thrusting a curved forefinger obliquely from the mouth for "speaking crooked"; a truth by a straight out movement; lying is also designated by the two little fingers hooked and the others crooked and sprinted apart; baldness and rejection by throwing a closed hand down, out, and opening the fingers; contempt or indifference by snapping the fingers, theft by the hand half shut, fingers apart, about to grasp furtively; miserliness by rubbing the thumb and forefinger; coquettishness by placing the forefinger against the head, inclined to the side; justice by holding scales; conscious beauty by the thumb and finger each side the outer corners of the mouth and looking pretty; ugliness the same, with face awry; friendship by locking the two forefingers or all the fingers; strength by clenching the fist and clutching the biceps and perhaps a violent downward throwing movement; too bad, or mild reproach, by placing the upper lip over the lower lip perhaps after a dental lingual smack; don't know or care by a shrug, as if to throw the matter off one's shoulders; conscious pride by a swaggering gait, with arms akimbo in a woman or hands in the pockets or behind the back in a man; drunkenness with reeling, and perhaps hiccupping after a drinking gesture; despicableness by sneering and turning up the nose. Indecent gestures are legion in number. Perhaps in this category also belong much of the motivation which impels children to make faces at others.

One class of gestures are vulgar and analogous to slang. Such are those of kicking one's self for remorse or regret; incredulity by pulling at the collar or neckgear, suggesting something too big to swallow; by pulling down the lower eyelid to suggest that the eyes are open or that there is nothing green there; craziness by whirling the open finger or even the hand about the head, suggesting wheels; intrusive confidence by winking with one eye; trying to laugh at a poor joke by tickling one's self; effort by wiping the forehead with the hand or thumb, with a motion of flipping gout of sweat upon the ground; decapitation by drawing the finger across the throat with a guttural k-h of spurting blood. Perhaps here, too, belong touching one's own head, shaking it, and pointing to another to suggest daftness, and yawning by opening the flattened hands at the wrist, which sometimes causes it in others by suggestion.

Mien, mimesis, gesture, and pantomime, can together express every one of the feelings and emotions more graphically and forcibly than words can do. Roscius, who could express a content in most ways, if that content were in the sphere of sentiment, might well have won over Cicero in the reputed contest. Strictly speaking, the inflections and stress that accompany speech are emotive gestures that enforce and illustrate the meaning of words, and vocalization, out of which language sprung, was itself first merely almost an incidental and accidental accompaniment of gesture. Emotional gestures, it is said, are less differentiated than intellectual ones, but this is because feeling is itself a more generalized form of mentation, and the same also is true of the terms used for feelings which are very inadequate and not sharply discriminated. Without gesture in the largest sense, we should know little or nothing about the feelings, and in its impending work of penetrating the field of emotional life psychology will find one of its new highways to this goal when opened up to lie through the interpretation of natural gestures.

When we turn to the volitional life, we find, again, that gestures can be more contentful than words, and can reproduce nearly every typical act and occupation of the human life with great fidelity to copy and with little miscarriage in communication. Such holophrastic motor talk is, to be sure, vastly harder than merely oral speech, the economy or laziness of which tends to depletion of content. Dramatic reproduction may be very hard work. Our muscles are not taut enough to talk with the eloquence of action of our paleolithic forebears, and so our mode of expression is attenuated, and mentation is "sicklied o'er with the pale cast of thought" till its reality often seems wan and spectral. In recounting to others and perhaps even, in recalling to themselves, men were once redoers of deeds. They did not hawk, trill, whisper, sibilate to the secret ear, which they could do in darkness, but reenacted all to the eye in the open light of day. They used no merely lingual or dactylic tongue, but their ideographs were formed more with the fundamental than the accessory muscles. This mode of communication has nothing esoteric, is not limited to a single tribe or circle that knows but one tongue and so needs no hermeneutics, but would be intelligible to the polyglot world, for there is no divorce between words and things, no nominalism but only dynamic realism in thought and life. No form of converse is so *anschaulich*, so compelling of attention and sympathy and withal so exhilarating to both orator and audience, and for this reason this pristine mode of imparting mental states passed naturally and inevitably into the primitive dances which set forth in idealistic form not only every emotion with profuse stage setting, but every typical phase of human activity, domestic, social, vocational, religious, and all the rest, and these have been invested with such charm that they have very often survived the last vestige of their original meaning.

One class of gestures is immediately connected with the senses,

each of which has its own group. For the tactile sense, there is stroking, patting, and the comic gesture of touching with the finger tip indicating touchiness, mimetic tickling, etc. A bad smell is indicated by constricting the nostrils or holding the breath, perhaps pointing to the sources of the bad odor, a common form of insult among children. A sneer is in part evolved from this latter indication of malodorousness and of repulsive flavors, while agreeable perfume or olfactory testing is expressed by sniffing. Good taste is indicated by smacking the lips and bad by opening the mouth, protruding the tongue and drawing up the lips, perhaps with incipient gagging and the mimesis of nausea, perhaps of vomiting. Hunger is expressed by hollow cheeks and pointing to the slightly opened mouth, and eating and drinking may be elaborately mimicked, satiety being indicated by rubbing or patting the stomach and starvation by pressing it in. Closing the ears with the fingers suggests loud or disagreeable sounds, and holding the hand to the ear means a faint sound, listen or speak louder, as indeed does even turning the head or leaning forward to bring the preferred ear nearer the sources of acoustic stimulation. Scowling and fixating, real or imaginary, by shading the eyes with the hand, holding up one hand to each eye as if the former were the tubes of an opera glass, casting down the eyes in shame or modesty, rolling them upward in prayer, closing them with, perhaps, nodding the head or resting it inclined on one side upon the hand for sleep, turning up the eyes, showing the whites below the iris for death, looking down and obliquely with elevated and inclined head for despicableness or looking down upon, fierce corrugation of the brows in anger, opening them widely in surprise and fright, fixating afar with eyes wide open as a sign of abstraction, dreamy revery, blinking, rubbing the eyes for sleepiness, wildly rolling them for shock and confusion, etc.—these indicate the wide range of expressiveness of which the lids and brow are capable, the eyeball itself, the center of all these changes, remaining perhaps unchanged. This class of gestures begins in infancy with taste and later with sight responses and evolves from these foci in mouth and eye. Well on in childhood, at an age extremely variable with individuals, these spontaneous reactions may become voluntary, and at about the same time they can be repressed. When consciousness can thus control them, they may be simulated toward imaginary stimuli, that is, sense gestures are susceptible of a high degree of evolution, and may thus come to express perhaps as great a variety of impressional, moral, and intellectual reactions to the world, as all that large class of words themselves, which etymology shows once expressed pure sense action, and later became symbols or metaphors of highest qualities and activities. We speak of good or bad taste in dress or art, bitter experience, sweet memories, a clean heart, a dirty act, a foul deed, a white life, a bright example; we hear the voice of conscience, see truth which is the light of the world, etc. Indeed, science has been

defined as reducing the world and life to expression in the simplest terms of real or possible sense experience. If this be so, it follows that just in proportion as we think clearly and resolve the world of man to its simplest, easiest, and most basal terms, we tend to restore at least in faint degree, the primitive facial mimesis which attends the activity of the different senses. This is to make thinking natural as well as economic. In proportion as we think in mental images, we play upon their complex efferent apparatus, and it is this which gives content and reality to our mental processes and tends to prevent them from becoming merely formal or verbal. Hence it makes for honesty and truth. In deaf-mutes, these intense facial reactions are sometimes highly developed, and are important factors in communication, while the blind not only preserve the facial expression of infancy connected with the lower senses, but their psychic processes are reflected in movements about the eyes. These mimetic reflexes in their faces, although most developed about the lower senses, make their thought more palpable and literally add a peculiar natural force and eloquence to their higher and most abstract thought processes. The play of these sense factors in speech and thought give a visual and emotive accompaniment and reinforcement, as if these senses were themselves acting upon the mental content and, thus making thought process less remote and abstract, in a way that convention represses all too soon in the children of civilization, among whom conversation grows verbal and desiccated, because divorced from the rich life of sense and feeling out of which the intellect arose. The conservation and development of this element gives pristine vitality and force to diction, freshness, wholesomeness, and even sanity to thought, approximates it to action and feeling, makes it lively with pictorial and dramatic content, and prevents it from aridity which, for the average man and woman, is the death of zest and the shabblonization of experience.

Facial movements and gestures reflect and express every emotion, every shade of pain from acute physical to moral suffering, and of pleasure from that of sense to religious transport. Thus these all are uttered and understood by intimate acquaintances without words. Although these algedonic states can both be simulated and dissimulated, the range of control is limited in their stronger spontaneous expressions which may affect every muscle, voluntary and involuntary, and modify every physiological and metabolic process. This all-pervading somatic resonance of itself suggests that this is the oldest and most basal of psychic experiences. Pain, of course, shows very many shades and grades even in early infancy, when it culminated in the full, almost convulsive cry, with abandon, which at its height is, perhaps, relatively to the total motive energy, the most intense degree of exercise the human individual ever puts forth, extending to every organic function. Laughing begins much later in an awkward way, and is at first far less em-

phatic, and, even in riper years, is far more under the control of the will. In its intenser forms, its facial and general motor effects more closely resemble those of crying with tears. Both may cause local aches, and, when beyond control, each may pass into the other, as is seen in hysteria. This, however, is only when and because their degree is convulsive. Within normal limits, the two are essentially distinguished and contrasted in their physical expression and in their subjective state. In infancy, however, the feeling is the expression, and there is no causal or temporal sequence between the two, but only the relation of identity. Even the slighter shades of sadness and happiness consist in the reproduction of the physiological processes which in our ancestry, human and prehuman, were depressive or exhilarating, i. e., repressed or augmented life. The evolutionary formula for violent crying is pain and devitalization seeking relief by learning, as animal life can do, to draw upon kinetic reserves. There is no psychic state, save the feeling of the act of crying, its kind and its intensity. The movements themselves are the felt ontogenetic traces of rudiments of all the efforts the phylum has made to escape or resist pain, and these movements bring with them more or less of the ancestral pain, for motor cells and contracting tissue are the bearers of such hereditary functions.

Deaf-mutes naturally become adepts in the use of this mother tongue of the race, and their gestures and those of savages are only dialects of the same primeval language. Both are surprisingly quick to catch salient points of strangers, and such new objects as glasses, long hair, mustaches, firearms, keys, tools, and things, are sometimes described at first with very elaborate gesticulation, air-drawing, etc., and when once understood a single characteristic movement or posture is selected from a complex whole and suffices. Many spontaneous gestures¹ may fairly be called universal, but upon them are now superposed more or less arbitrary symbols, such as touching a part of the hand or the body for each letter, then dactylology, and last of all, articulation, taught at first by manipulating the mouth. These latter tend to repress gesture, which is indeed often forbidden, somewhat as the speech of adults still earlier in life checks the spontaneous evolution of speech in normal infants. By these movements, the language of the deaf loses its generic fundamental character and becomes specific, alphabetic, and even phonic and thus much is lost and much gained. It is an inestimable advantage to speak, and parents prefer this method because it rescues their children from isolation and tends to make both almost forget the infirmity. Yet most deaf-mute children, when they first come to an institution where instruction is given, have already learned many gestures of much grace and even beauty. To penalize them for

¹Hartmann, Arthur: *Taubstummheit und Taubstummenbildung*. Stuttgart, 1880, 212 p., chap. xii on Gestures. See also J. H. Keep: *Sign Language in Deaf-Mute Education*. New England, vol. xxvi, 506 p.

using these condemns the child to solitude during all those gregarious years required to learn articulation. Moreover, their voices are always hard and disagreeable and the children soon come to know it and, hence, often dislike to speak and perhaps cease to do so after leaving school. Training in speech is very hard for the voice and there is often great pain, while its quality deteriorates, for the speech is not natural, but is like walking with a partially atrophied leg. The use of signs to translate the meaning of words makes phonic instruction more rapid and contentful and shows what is and is not understood. Signs are so full, however, of power and life that they do strongly tend to encroach upon more artificial and later methods. Slovenly modes of speech, like the Yankee dialect, are easier for deaf-mutes, as indeed they are for others, than is correctly spoken English, and clergymen who drop the use of manuscript and preach more naturally without notes often recover by so doing from clerical sore throat, but speech for deaf-mutes magnifies both these difficulties, for it is far harder than good English for the normal person or unanimated reading for the clergyman. It is, therefore, as cruel to forbid signs as it would be to forbid English on the street to beginners in Latin. It is also unpedagogic, for signs give vitality to speech that nothing else can supply. Hence, signs, finger-language and speech should be combined.

We are told that in 190 A.D. the 6,000 pantomimists in Rome were retained in the city in a famine when strangers and philosophers were banished, so highly were these dumb actors prized. They were interpreters with people of unknown tongue and attended armies on their conquests and there were at least two schools: one dignified and serious and the other sportive and often indecent; and so expert were they that the lives of great men were told by signs. Probably only deaf-mutes under favorable conditions can nearly approach this perfection, or could in the days when Abbé Lambert published his dictionaries of signs, but these had been repressed in the interests of articulation and lip-reading. Many of the simplest of these are tropes, especially metaphors which called the hero a lion, or metonymy which puts e. g. the sword for war, the concrete for the abstract, or synecdoche, which puts the roof for the house, the beard for the man, etc. Height is expressed by raising the hand or looking up; depth by the reverse; intelligence by tapping the forehead and looking wise; deafness by stopping the ears; blindness by laying the finger on the closed eye; the future by a wave of the hand in front and past time by a backward movement; long by drawing out as if a string from the other hand; stiffness by rigidity of body; dreams by a sleeping gesture and moving the fingers wildly before the closed eyes; a mirror is indicated by standing before it and making a toilet; a chair by the gesture of sitting in it; sand by letting it sift through the fingers; a fly by a movement of catching it; boots by putting them on; lightning by zigzag with the finger; old age by its pos-

ture and gait; thunder by collapse of flexed joints; Jesus by pointing to imaginary wounds in hands and feet; a doctor by feeling the pulse; etc. Most such signs are ideographic movements which all understand much more readily than they do the sometimes painfully artificial hollow cachophonous words which the German method produces, repressing both gestures and spontaneous noises as "in-human."¹ They are quite as designative as onomatopoeia is for sounds in nature and indeed are compared with it.

Compound signs follow the same rubrics of origin, mode of use, form, effect for cause, and vice versa, general indication with specific marks, etc. For rich and poor there is first the sign for man and then the specific sign of the condition or the kind of man may be further designated, as little, dark, crooked, hungry, etc. To state that he is a father, the elbow is thrust forward from the right side as a sign of generation, with the reverse movement for mother. A boy is a man plus the sign for short stature, and for a girl, the sign of a headdress or long hair is added; assassin is indicated by the sign of stabbing with the thumb; a goose is a bird with a bill sign made with thumb and finger; a red rose is flower plus the act of smelling and perhaps thorns and touching the lips for red; snow is white, falling obliquely or of snowballing; boat is tracing its form plus the act of rowing; a calf is a quadruped with the sign for little and the gesture of sucking; a caterpillar is a worm with pointing to the hair and the gesture of gnawing leaves; a tablecloth is the act of spreading or smoothing it; a bee is designated by the mimesis of stinging and of the hand swelling; a dog is indicated by patting the knee and imitation of its bark; hare is long ears, shooting, and eating with pleasure; apron, cravat, stocking, glove, by the act of putting them on; pump, swing, door, cradle, watch, etc., by the act of using them.

The sign language knows neither noun, verb, article nor pronoun and its syntax is radically different from that of oral speech, but the deaf-mute can represent the temporal sequence and in that he has the advantage of the artist. He can also abstract, localize, and accomplish much by assignment. He deals with roots and is greatly helped by trained teachers who are also deaf-mutes. Complex signs admit of and soon attain great development. Methodic and artificial signs are diverse, somewhat like, though less than, dialects or even languages sprung from one parent stem, and yet most diverse signs for the same object are easily understood by those accustomed to others. As accompaniments of words they have great explanatory power for normal persons, but are far more helpful in aiding the intelligibility of the somewhat ghastly vocalization of even the most expert articulators among the deaf. The

¹ See Hearne's admirable articles describing many of these natural signs in the *American Annals of the Deaf*, beginning April, 1875, vol. xx, 73 p., and continued in four articles.

teacher always has very much to learn from the pupil. The fact that many of the de l'Épée signs are highly artificial should not prejudice the cause of natural signs.

Rudolph,¹ taking his departure from facial expression, finds six primitive forms of psychic excitation: viz., fear, concentrated energy, repulsion and disgust, impulse to bite, eat and get, joy, malevolence, and hate. Beneath these lies only the principle of opposition, i. e., attraction toward the pleasant and aversion from the painful. From these he derives all the nine hundred and seven species and varieties of emotional expression depicted in his cuts, all presumably of his own very plastic face. This involves a very complex scheme of emotions which the author makes little attempt to justify or explain in detail. Indeed, it is impossible to evoke emotions of a very pure or strong kind at will, and very many, if not most, of these grimaces are so conscious and arbitrary that they are not readily intelligible and the significance given them by different writers would differ greatly. Even if the feelings were evokable by an experienced and skillful actor or pantomimist, no face is plastic enough to express them all, and each cast of countenance as well as each innate type of psychic disposition predisposes to excellence in some and efficiency in other forms of expression. This writer's face, e. g., is heavy and serious and his efforts at hilarity in all its forms are but little contagious and are hence lacking in interpretative efficiency. The face of these cuts is somewhat too old and rigid and not a few of the expressions are not pronounced enough. This defect is obtrusive, despite the fact that most of the physiognomies have been much retouched and given accessories in the way of modifications of the hair, beard, dress, and interpretative hand gestures. Conventionalities, such as the influence of certain well-known crucifixion faces, the Laocoon, etc., are manifest. In thirty-six general classes of expression are included facial gestures of each sense in action and in defect, as well as blowing, yawning, sneezing, etc. The Lange-James theory that the feeling is the physical expression may encourage writers of this kidney to make faces and then put a name to the feelings they think they express, but aside from a dozen or so fundamental emotions, such interpretations are as diverse as are the attempts to describe the sentiments and imagery of musical phrases. I have shown these and other similar cuts to children of various ages and find that lively girls in the early teens very quickly and readily reproduce almost every facial expression, and some are extremely clever in describing, often in very original phrases, the psychic states represented. Whether they are innately less expert in making faces than boys or merely more reluctant to distort their features, they certainly see more meaning in facial expression thus depicted than do

¹ Rudolph, H.: *Der Ausdruck der Gemütsbewegungen des Menschen*. Kühnemann, Dresden, 1903, 2 vols.

boys. Yet the faces of girls unconsciously or instinctively reflect finer shades of emotion than do those of boys. In all such depictions the potent defects of movement and of changes of color are of course eliminated. This author refers to no authorities whatever save Darwin and does not discuss the perhaps most practicable of all questions in his field, viz., whether facial contortions of the kind he commends increase or reduce plasticity of the countenance in its unconscious play. We believe it can no longer be doubted that most faces are less expressive than they could be if the natural expression of emotion were not checked, and that some such mimetic gymnastics should betimes be a part of the æsthetic education of all, not only to prevent rigidity of features but to widen the gamut of emotional life. Experiments in having children and youth make faces in imitation of a well-chosen series of cuts and then describe what they express are greatly needed. The old admonition against face-making should thus give place to exercises of this faculty and these will no doubt soon be curriculized.

Hughes's work¹ is the most belabored of all the recent books upon the subject and shows wide reading and much thought. It is written from the standpoint of a voluntaristic psychology, for he says ours is an age of will and deeds. He strives to be in a sense genetic and his interest centers about the question how natural, instinctive movements are transformed into symbolic expressions. He makes four chief kinds of emotional feelings, viz.: (1) mood (*Stimmung*), including jollity, joy, complacency, abandon, bad humor, ugliness, despair; (2) attention, ranging from liveliness and energy to wildness, rage, relaxation, exhaustion and unconsciousness; (3) inclination, from love and benevolence to aversion and hate; and (4) respect, from reverence and honesty to modesty, shame, fear, and contempt, and he makes much use of opposition, laying off feelings along a plus and minus line each side of an indifferent point, those of desire, its highest positive form of striving toward, shades through inclination to indifference, then rises negatively through aversion to resistance, the latter representing the negative pole of displeasure and the first the positive one of pleasure. So the rapture of enjoyment shades down through rest, which is neutral, to pain, the highest evaluation through indifference to contempt, genuineness into falsity. Many of his characterizations are graphic, but there is the tendency that besets most literature upon this subject to overnormalization, the analyses are too refined and the rubrics more or less speculative and systemization is overdone. Although his work is chiefly devoted to conscious and purposive gesture, the phenomena of natural expressions are the key to nearly all his problems, so that in passing these over so lightly one's verdict upon the validity of his conclusions often hovers in the

¹ Hughes, Henry: *Die Mimik des Menschen*. Alt, Frankfurt a. M., 1900, 423 p.

air. The style is often prolix and even tedious. The author professes to be genetic, but his interpretation of this word will prove misleading to all interested in evolutionary origins. Hence the work is not sufficiently concrete or empirical, but hovers somewhat in the air. The descriptions are often excellent, such as those of desire, uncertainty, searching, triumph, the food quest, jollity, sycophancy, etc.

The most elaborate and systematic work on the basis of Delsarte, who published nothing, is that of Giraudet,¹ who would have people dance and sing with the same freedom with which they walk and speak respectively and who pleads for a new æstheticism as an "emanation of the soul." He lays less stress upon the Delsartian symbolic philosophy than did Abbé Delaumosne² and is more practical than Arnaud.³ Life is action and this is expressed in man in seven hundred and twenty-nine kinds of dynamic phenomena grouped in a trinitarian way and all classified as either constitutional, habitual, or fugitive. His cuts of passional attitudes and expressions of eyebrows, nose, mouth, head postures, shoulders, arms and hands, trunk, legs and feet are mostly characteristic and distinctive and have contributed much to revive Delsartian studies for the stage in France where they had sadly declined.

Will interferes with the purest manifestation of expressive gesture, says Kohnstamm,⁴ which is at bottom involuntary utterance of feeling. As its purest indicator, such expressive moments have immense importance as revealers of associations of our entire psycho-physic apparatus. They are the physiological equivalents of the feelings and begin perhaps among the very first expressions of life. The telo-kinetic end is a relief. Their purposefulness is great, but without consciousness. One principle underlies the visceral or smooth and also the voluntary or striate muscles. As anger checks sensations of the secretions of the fluids of the stomach, so hypnosis may influence menstruation and possibly ovulation.

Albert Borée⁵ makes a valuable contribution to the material for a theory of physiognomy. He has for many years been connected with the theater, and attempts here to assume for the benefit of actors and painters and sculptors ten groups of facial expression for the various sentiments. It is indeed a brief dictionary of the characteristic expressions of the various emotions. All are photo-

¹ Giraudet, Alfred: *Mimique. Physionomie et Gestes.* Paris, 1895, 128 p.

² The Delsarte System of Oratory. Tr. by F. A. Shaw. Werner, Albany, 1887, 546 p.

³ F. Delsarte: *Ses découvertes en esthétique, sa science, sa méthode, précédé de détails de sa vie.* 1882, 258 p.

⁴ Kohnstamm, O.: *Die biologische Sonderstellung der Ausdrucksbewegungen.* Jour. f. Psychologie und Neurologie. 1906, Band 7, p. 205-222.

⁵ *Études Physiognomoniques. Les Expressions de la Figure Humaine.* Laurens, Paris, 30 p.

graphed from a single face and in all there are one hundred and nineteen of them.

As thus interpreted, is it not plain that the new dancing should be taught in every school, even if it has to be open evenings for that purpose? The dances chosen should be simple, rhythmic, and allowing great freedom. We should select from the best of all nations those most fit for each age, and curricularize them to cultivate a sense of rhythm, ease, economy, and grace of movement. There should be great variety, and pose, balance, control, ease, presence; bearing should be the goal rather than posturing or feats of agility. Rightly conducted, some of these old dances might be made the very best basis on which the sexes in the adolescent ages could meet. They palliate instead of increase the sense of awkwardness, and are just formal enough to give a certain regimentation to this intercourse, and they place the two sexes on an exact equality. They give also a sense of social solidarity. While aiming to bring out all the delight that inheres in such cadent movement to music, in themselves they should also aim to give pleasure to the beholder. Indeed, this latter element should never be absent. I know at least one young person who takes the greatest delight in choosing a musical selection and then working out with great ingenuity, phrase by phrase, with more changes than a poet makes in his lines, the suitable steps, pauses, turns, advances, recessions, bar by bar, until at last the music is set to a melody or poem which fits it and nothing else. I have been surprised to see the great ingenuity displayed in this work, the sure rewards of patient and persistent effort, the extraordinary delight in repeating such a dance when perfect, and have myself felt an exquisite pleasure in seeing it. Only by beginning with the school and cultivating a taste for better things and the ability to achieve them can the ballroom be reformed, and the evils that have gathered about this most artistic of all the forms of movement be eliminated.

Another end to be aimed at in teaching all children to dance should be the implanting of a habit of so doing that should last on into maturity, not to say old age. In Merry Old England, and in the palmy days of the great French dances, matrons with gray hair went through the minuet and

pavane with their grandfathers. Young people of high-school age, especially girls who show the least sign of talent or genius in this field (for the domain gives the amplest scope for both), should be encouraged to elaborate original developments upon musical themes or to dance out songs.

There is probably nothing in the hedonic narcosis that æstheticians describe on beholding a masterpiece of art that may not be felt in seeing a terpsichorean performance of the highest merit. A German writer has entitled an article "Dancing as the Chief Joy and the Highest Expression of Life." When we reflect on all the historical varieties of descriptive dances—on its hygienic, euphoric, social, moral possibilities—we may well ask the church whether it is not high time that it should cease to pour out the child with the bath, especially when we realize that the religious instinct would have been far feebler than it is to-day but for the development that the dance has given it, and that it can still teach reverence, awe, worship—that love of God is just as capable of motor expression as is romantic love. Many young clergymen and progressive churches are already beginning to bestir and inform themselves, and to realize that the time is at hand when they must act in this matter.¹

¹ See Dictionnaire de la Danse, par G. Desrat. Paris, May et Motteroz, 1895, 484 p. Also Der Tanz und seine Geschichte, von Rudolph Voss. Berlin, See-hagen, 1869, 402 p.

CHAPTER III

THE PEDAGOGY OF MUSIC

Music and mysticism—Music as an expression of the primordial activities of the soul—Its relation to dancing—Musical ecstasies and haunts—Educational value of music—Suggestions from the music of savage races—Relations to poetry and mythic themes—Musical capacities of very young children and their utilization—Experiments and tests upon discrimination, keys, range of voice—*Questionnaire* data upon musical appreciation—Music and sex—Synesthesias—Effects of barbaric music—Precocity and anamnesia—Singing—Effects of weather—Tonic sol-fa—Psychology of rhythm—Wind instruments and the violin—Place of the technique—Experiments on musical imagery—Inadequacy of musical instruction in colleges—Pedagogic value of the pianola principle—Musical training of teachers—Effects of music upon nerve poise—Teaching confidence in human nature.

THOUGHT and reason and their vehicle, speech, are all three of them novelties in the natural development history of the soul. In the dim past, psychic life was very different from what it is now; feeling, instinct, and impulse were all, and they were common to the whole race and to animals, while intellect not only came late but was largely an individual product, causing people to differ from each other and stand out from the species. It is of this older, larger, deeper, and more generic soul of man that music is the best and truest of all expressions, especially if with singing we consider gesture, mimesis, and dramatic action which arose with it. Music is the speech of this antique, half-buried racial soul. It did not evolve from love calls or charms alone, as Darwin thought; nor did it first appear as a tone-colored accompaniment to speech, as Spencer's broader theory taught, for it is older than language, as Weismann, Boas, and Galton have shown, and capacity for musical culture is latent in many primitive races. Birds, which evolved long before man appeared on

earth, practiced this art, and so did animals and even insects, the very first of all creatures to emerge from the primeval sea. Indeed, if we stretch the term to its very uttermost and make music include all acoustic expressions, the wind, rain, thunder, sea, are the oldest of all musicians, for trees and brooks came later, after the land appeared.

If we abandon ourselves to the very madness of mysticism, we may say that vibrations and impacts are as old as matter, heat, light, or even atoms and electrons. Probably all energy is rhythmic and cadenced, so that in this sense the music of the spheres which Plato thought the sweetest and most symphonic of all, even though we cannot hear it, is no longer myth but science. To all these influences, protoplasm, which is the sugared-off, vital product of the cosmic elements and processes, has responded from the first, for it is the material soul of the All. This pristine *rapproch* was closer and more all-sided before any special acoustic sense was developed for it. Thus, though man has lost many of the old and subtler responses and perhaps has shed a whole series of ascending rudimentary organs for them, the human ear is the result of a longer development process, which has made it the highest and the most specialized organ of response to vibrations. But the influence of all these buried reactions still whispers among man's central neurons; and, in his appreciations of pure music, reverberations are still awakened of the immemorial past when his personality was not yet so sphered and specialized out of the cosmic whole. Thus, in music, man may to-day dimly revive the most ancient elements and experiences in the history of his soul. If heredity is cell memory, the æsthetic response to music is the awakening of echoes far older than the earliest acoustic organs; and, in this process, man remembers the earliest as well as the subsequent stages of his evolution. It is the art of arts because most prehumanistic, and also most prophetic of the superman that is to be.

It is this aspect of this sovereign art that can justify, if anything can do so, the enthusiastic characterizations of it by writers like Mario Pilo¹ that it utters the essence of things, best explains the world, is the chief interpreter of religion,

¹ *Psychologie der Music*. Leipzig, Wigand, 1906, 222 p. Ed. by C. D. Pfau.

that it propounds and answers the ultimate problems of life, or gives at least a mystic meaning to Schopenhauer's phrases, that it is the last word of the highest philosophy, that it is the revealer of ultimate metaphysical being of the will and soul and of nature itself. Only from some such viewpoint can we see light in the utterances of German æstheticians who say that music expresses all the cosmic emotions, utters every potential as well as every actual feeling, that its kingdom is not of this present but also of the future world, and that it should be made the very most of because it strikes its roots deepest into the past and most securely shapes the future so that its home is in the infinite, that it shows everything under the form of eternity, that it utters all longings, even the dimmest, puts us into *rappor*t with stars, sea and dreams, and draws the ideal down from its fatherland in heaven, if, indeed, it itself be not the very essence of God.

As the dance in the sense described in the last chapter is the purest poetry of motion, bringing out all the varieties of movement possible for the body as a mechanism, and thereby, on a theory that physical precedents condition psychic changes, evoking all the wide range of psychic states that motor attitudes and combinations can suggest, so music is the dance of the emotions. It is more and better than their gymnastics, for it also suggests impossible activities as well as passive movements. It compels every mood in the whole gamut of human experience, brings tension which may become almost rigidity, makes us feel that the cosmos is lawful to the very core, and that all is preordained in the sweep of ordered and controlled forces, and anon gives us a sense of exhilarating freedom, as if we lived in a world where nothing was impossible and our powers were adequate to transcend every regulation and overcome every obstacle. We realize our insignificance and the power of fate and iron necessity which holds things in its bounds, and yet we feel that not only all that man has been or done in the world we could do, but vastly more. We glimpse the abysses of woe and the shining pinnacles of every joy. Music limbers each faculty, loosens and softens all that is hard in the soul, stretches out every faculty to its fullest dimension. Potentialities that slumber through all the rest of our lives are by this art once or twice thrilled just enough to

make us realize that we live and die with vastly more in us than we ever know or dream; and perhaps we sicken for an instant in the view of the flitting vistas that might open. We may lose all contact with present reality and float off expatiating over the wide areas of racial experience that our individuality is vastly too restricted to realize. The limits of our personality become less opaque, more transparent, and the vast encompassing phyletic environment that stretches beyond is sensed. Perhaps the eye moistens, the heart throbs, we sigh, the muscles grow taut, we thrill and shiver, long for light, love, efficiency which we can never attain, or rather which in essence becomes our very own, though but just for a fleeting, tantalizing instant. Again, spontaneous images of the most diverse kinds, in the domain of the higher senses, and for some persons of every sense, with every degree of vividness, from shadowy dimness to almost illusory coercive power, sometimes utterly detached and disconnected and again sequential and serial, crowd the imagination. We feel ourselves catching up forgotten themes that otherwise would have entirely lapsed from our lives and minds, perhaps working them out a while, then dropping them for others, and this cerebration goes on in ways that actually transform the background of our conscious life. Thus we are sometimes impelled, although we know it not, up and on the evolutionary way of human development toward new regions and anticipate what man is to be in the future when he is more complete. But more probably most of these unique psychic experiences consist of rehearsing in vague snatches our vast ancestral history, which is usually submerged in ways that we cannot fathom or explain, till we know vastly more of the modes in which heredity in all its countless backward reaches makes itself felt in the soul. After a musical ecstasy with its illuminating and thrilling vitalization, its play upon every part and physiological function, its exquisite mental inebriation, its essential and transcendental discipline, how our ideas of man's soul are vastated, how pitifully narrow and inadequate our psychologies seem, and how zealous should be our advocacy of a pedagogy that shall guarantee to every soul, especially during adolescence, when it is most susceptible, adequate exposure to this art that has in it more promise and potency than any other

kind of culture, that is without exception of quintessential, liberal, humanistic, educational value! To me it seems that no art is in recent years growing quite so fast or showing so many bold new departures, is making more progress in getting close to life, finding more new resources, and that in none does teaching lag so far behind what it could and should do for the development of the human soul.

But does music pay? To the mucker, Philistine, or to the pedagogue, no; less than anything else. For most there is no money in it, and for nearly all the few who will teach, or even perform, but very little. It is hard to examine in music save in mere note reading. Young children do not under present methods feel it much, and older ones do not know that they do. All its best, most edifying and preforming effects are very far beyond the reach of all our tests. So the music teachers must cast bread on the waters, sow seed they will never see ripen, walk and work by faith and not by sight, and are by the very psychological nature of the subject always deprived in very large measure of the fruition that is the true teacher's best reward. Would that they might realize more of what the psychogeneticist now sees of the pedagogic efficacy of music, and be heartened by his new and growing respect for their work! Would even that they might hear more and oftener the best music so as to be led captive with utter abandon to its charm, and thus become more idealistic and learn more respect for their own vocation! They should learn to describe to pubescents occasionally in words what music means to those who love it, interest them a little in the lives of the great composers, performers, and singers, tell their classes with what travail of soul some of the great masterpieces were created, how historic virtuosos have entranced vast audiences. They should make all their pupils understand what spells have been cast and what raptures have been brought, what battles music has won upon bloody fields, what patriotic movements it has expressed and helped create, etc. The very history of some of the great national airs is itself an inspiration. By these simple melodies and words countless men and women have died, soothed and sustained to the very brink of the grave. Here is a little group of songs that have saved many a soul from sin, have led wanderers and prodigals home;

here are some that have comforted thousands of mourners whom death has bereaved. What class would not sing the Marseillaise hymn vastly better after having been told a little of its history and learning, e. g., how the Girondists sang it together as they went to death one after another, the chorus growing fainter but the air sustained till the last head fell under the guillotine? Throughout the South to-day it is not the voice as much as the heart that sings "Dixie," because that is a melody that is vital and not desiccated. Music in schools should palpitate with the emotional life in which the best of it was born. It should be set in its matrix of historic meaning, or it is a cold and clammy thing. Children should not be asked to sing unless they feel. Without emotion music is denatured, and its substance is sacrificed to its form. With each vital selection, therefore, should go the story, if it have one, and those songs that have stories should be always preferred. Music can express the soul of great men, epochs, events, races. These can live, move, and have their being in music, which is thus in some sense the very soul of history, especially culture history. It should be given this setting for children. The sentiment of the period and the personality of the author of "The Battle Hymn of the Republic," "Die Wacht am Rhein," "Rule Britannia," etc., should be made to glow in the juvenile soul beforehand by vividly and carefully prepared description and story. Musicians should be full of patriotic, not to say military, spirit, and national dance music should, if possible, always be illustrated somehow with the steps and postures that go with it; and even love songs should be set in definite circumstance and romance to the imagination, and, if used, should be made to elevate, long-circuit, and idealize rather than to sensualize the tender passion. School music usually lacks all this, and that is why much of it is a ghastly relic made up of technic, intellect, and voice culture, from all of which the soul has gone. Nowhere has the logical been so oblivious of, or opposed to, the genetic pedagogic order. Current methods are worse than teaching the child natural history from a few dried plants or stuffed beasts and birds. I honor the very indifference of the average child to its music lesson, because this is its own mute protest against a monstrous thing. The music teacher should have unusual range and

strength of emotions, and should never require pupils to sing what or when they do not strongly feel.

As we are here concerned with education we must pass very slightly over the tempting field of music in the insect, animal, and even the bird world, which is so important for the psychogenesis of the art. I cannot conceive how any can doubt that lower creatures truly sing, and that in the most vital sense of the art.

H. W. Oldys¹ thinks that in both birds and man vocal utterances began with simple ejaculations and slowly developed increasing concatenation. Some birds have beautiful voices and great skill in using them, while others with less power of brilliant execution have songs that rank higher as musical compositions. Repetition of single notes or phrases, and combinations and variations of intervals are common. Most writers doubt whether birds have any sense of our melodic scale. Some except the cuckoo, wren, song sparrow, woodthrush, chewink, robin, and so on. They are certainly often close to our notes. Concerts and ducts this author thinks he has observed and describes. There are sometimes repetitions so that the same esthetic rules appear. Some birds, it is well known, can produce human melodies.

The gong-beat method of the Sarawak Malays is very complicated. Their orchestra usually consists first of several small gongs on a bamboo framework, a larger gong, two small drums, and a still larger gong, the *tawak*.² The three first keep excellent time, the third emitting a high note irregularly, accenting the first of every four sounds. The *tawak* has what seems a totally independent rhythm. It is beaten in various modes, all of which seem to be marked by the absence of time, the beats recurring with incomprehensible irregularity. Yet, when an expert passed his instrument to another, the novice was derided, showing that only an expert could play it. This rhythm is accompanied by no movement or song. Its beats are damped with the left hand, and sometimes the body and sometimes the central boss is struck. By these differences this instrument carries news of death, war, and childbirth, each mode of beating having a recognized meaning. Myers had a Malay tap upon a Morse key as if he were beating the *tawak* and registered the time. He found there were many different methods at first, his time figures seemed very irregular. He finally concluded, however, that one series of beats was grouped in two alternately recur-

¹ Parallel Growth of Bird and Human Music. Harper's Magazine, 1902, vol. 105, pp. 474-478.

² Charles S. Myers: A Study of Rhythm in Primitive Music, Journal of Psychology, 1905, vol. 1, pp. 397-406.

ring bars of different lengths, one of them comprising seven and five tenths units or tenths of seconds, and the other five units. The beats within the latter bar are always two in number and have the values of two and three. Those in the former bar may be two or three in number, and with any one of four different values. The alternations of such measures would not be appreciated by the European ear. In two of the methods the beats, separated by intervals of different lengths, are gathered into distinct groups, each divided from the neighboring groups by one or more beats, one closing with a succession of very rapid and the other with very slow beats. His studies convinced the author that these Malays can regard many successively different intervals of time as a coördinated whole which they recognize when repeated in the course of a performance. This faculty they carry to a degree which lies so far beyond the power of civilized musicians that the latter may reasonably be skeptical as to the possibility of its occurrence among less advanced people. But corroboration has been found by Day, who gives a table of some forty rhythmic periods of early Indian music, each having its own name and mark of notation. Day, however, found it hard to believe that such complex periods were ever in very common use. There is, however, no doubt that the early Indians, like the Malays, enjoyed the faculty of combining successive dissimilar periods and of regarding them as members of a complex unity. The rhythms of the ancient Greeks and Arabs were scarcely less complex. The pæonic and hemiolic rhythms of the Greeks are remarkably founded on the ratio 3:2. Each of the five beats some think could be subdivided into five, so that the foot might contain the ratios of 15:10, the precise ratio of one method of tawak beating. The poetic meters were probably overlain by musical rhythms just as the tawak accompanies the gong and drum orchestra. It is pretty well made out that the complexities of the Greek lyric meter are due to overlapping of rhythms. One writer ascribes their æsthetic value to an effect resembling counterpoint in music. Fillmore says of the Omahas, "I know of no greater rhythmical difficulties anywhere in our modern music than these Omahas have completely at command in their everyday music. . . . Rhythm is by far the most elaborately developed element of Indian music." The feeling for rhythm is highly developed among the Japanese, even the most difficult syncopations being performed with a precision that would astonish a European musician. It has been found also in Siamese and Javanese music. Sometimes syncopation and change of rhythm are so frequent that we are unable to detect any constant primary rhythm at all. Others have emphasized the ability of the American Indian and the East Indian to perform five- and seven-pulse measures. The traits of primitive music, therefore, are a delight in change and opposition of rhythm and a demand that relatively long periods filled with measures of diverse length be apprehended as an organic whole or phrase. With us musical progress has been by the elaboration of

harmony rather than of rhythm. With the advance of choral singing a more regular and frequent accent was necessary than in primitive music, which is unhampered by the demands of harmony and polyphony and which has therefore evolved complications of succession rather than of simultaneity, of measure than of tone. In early mediæval music we find irregularities and often defects of rhythm, and in recent times composers often obtained novel and striking effects by departures from uniform conventional rhythm. Whether they will reattain or adopt such complex rhythms as are found among certain primitive people will in part depend upon gradual education of the audience and in part on "the limiting value of the strain of attention which is compatible with æsthetic pleasure."

A poet and musician,¹ who is perhaps better known as an author of novels, observed that his own children, reared in a musical atmosphere, in their dreamy moods, crooned melodic snatches which were utterances of sheer emotion. The drawings of the child are very whimsical oddities. Its sayings come rather nearer expressing his true self. But the true evolution of the child's soul from within is found in song. When twenty-eight months old, the author's boy composed and sang a very simple phrase to the words, "I saw the pussy in granny's window." At three, a longer tune was unconsciously invented to the words, several times repeated, "Oh, the sun is on the bath and the birdies are building nests in the trees." Various others express a dreamy kind of wandering in more or less accented notes. The second boy, at seventeen months, uttered a distinctly musical call, imitated a trumpet and showed a distinct sense for key, with leanings toward plagal cadences. The second child is quite as musical as the first but less prone to dreamy soliloquies. Some of these songs show tonality; others are in very marked cantabile style. Occasionally the words are gibberish. The real minor is rare. The spontaneous music of these children was easily more in tune than music that they had learned. The author believes that canon, instead of being a late refinement of musical art, is one of its earliest developments, and is led to this view by observations on his own children. By rolling sheets of paper like trumpets the children would improvise in unison, the elder leading and the other following so promptly and truly that it was difficult to tell which was the leader. So when the father invented tunes, the children followed with startling ease, as though all three were inventing the same thing at once. If the scale is not natural, it is certainly imbibed very early, although when very young children are set to learn even simple little melodies, they lose tune at once. The author's view is that by centuries of culture and experience we

¹ Child Music. A study of tunes made up by quite young children, with very striking examples and illustrative remarks, concluding with elaborate pieces founded entirely upon young children's tunes. By William Platt. Simpkin, Marshall & Co., London, 1905, 37 p.

have discovered a scale at harmony with natural law which is quickly assimilated. In the history of the race, the plagal cadence is earlier, and children redevelop it for themselves; but in the history of concerted music, canon is an early feature, and this children rediscover. The tunes of the more resolute younger boy more often ended on the keynote. Finally, the author has taken these simple tunelets, intact and exactly as they were invented, as themes for rather elaborate compositions of his own, often adding, however, new verses, but adhering closely to the thematic material of the children. One child persistently avoided strong accents.

O. Koerte¹ has experimented at length upon his seven children by teaching them music at home and reaches the conclusion that the ethical movement, which many artists think should be neglected for the technical side, should be supreme. He regrets that the copious resources of music are not brought to bear effectively, as they should, upon either the masses or the young. Most live either without music or with bad music. Education to music and through music are parallel and mutually determining norms. He accepts Billroth's answer to the question, Who is musical? and doubts whether all have by nature even the capacity for rhythm, which is a far more complex thing than mere time and measure. He would begin at least with children not later than five, and lays great stress upon imitation. At first he would not entirely exclude humor, but the basis of all such practice should be folk songs and child songs with simple tonality such as is seen in the chorals. Good music can be repeated and made ever new by light dynamic and rhythmic shadings and variations. Harmony, such as a piano can supply, greatly supports the appreciation of not only music but even melody and intervals in the child; but accompaniments must be played very lightly. The task not only increases interest but makes the innovation of the tone easier. Immediate following of tones eye to eye is itself a valuable discipline. The higher tones are more likely to cause detonative singing. He would practically forbid all singing of scales, and, of course, gives the major scales temporal, as they also have historic precedence. Even those with poor voices should sing.² Now that we know the limits between the highest and the lowest notes which the average child sings with ease, we can regulate our work accordingly. Pronunciation should be natural, and not through the teeth or nose, as so many are prone to sing. So in respiration we should be careful not to depart far from nature. All instrumentation rests on somewhat insecure foundations if not based upon singing.

A. Koenig³ says that children should early learn to combine tones

¹ Gedanken und Erfahrungen über musikalische Erziehung. Zeitschrift für pädagogische Psychologie. Berlin, 1902, vol. 4, p. 11-38.

² See my Adolescence, vol. 2, p. 27 *et seq.*

³ Die Entwicklung des musikalischen Sinnes bei Kindern. Die Kinderfehler, 1903, vol. 8, pp. 49-61, 97-110.

in melody, and can do so with the same degree of creativeness that they can mold sand. Preyer's child was quieted by music at the age of six weeks. Strümpell found a child who was interested in the piano at the age of twelve weeks. Rhythm comes very early. Preyer observed tact movements at eighteen months. Mystics have thought that a child might hear "divine sighs in the air which it breathes." Of course the music must be very simple and not polyphonous. The child does not understand beauty of musical form any more than it can understand the form of poetry. Sense for the spiritual element of music does not occur in children. Truper thinks one third of the children hardly hear normally. So does Monroe. The May of life blooms but once and soon passes. Perhaps the inner soul of music is most felt by man, and woman is more receptive. In complex rhythms girls are more helpless than boys. Heredity is uncertain. Some have said that children do not sing of their own motive, that wordless humming occurs only by adults, that children only use words; but others think children perceive music before they can learn words. Simmel, speaking of yodeling, thinks music is connected with sex. According to Groos, primitive music is connected with war. Speech and music give to hearing its first significance and lift man into the psychic sphere. Perhaps in training numbers we must aim only at mediocrity. Musical memory is little used. Koenig proposes an elaborate *questionnaire* to ascertain certain facts about the early development of music and rhythm.

Miss Hofer¹ says self-activity, spontaneity, self-expression, play, spirit, must be the watchwords in music as in all other things, and inceptive work, which recognizes native impulses, needs more attention. Unmusical teachers do great injury. The end of all training which aims at ear-mindedness must be to arouse the consciousness for voice, tone, inflection, tempo, and to develop musical consciousness by increased capacity for hearing and appreciating tone. This is greatly aided by using the voice. People who cannot sing have been neglected at this nascent period. Language should be more inflected and not hurried or chattered. Song should be musical conversation, and speech, music, and language should blend. Musical good mornings and perhaps simple original creations with imitative songs, help the child to appreciate the music of nature, which is very important. The child can understand what occurs to the ear and mind, long before it can produce. Music ought to be a means of communicating ideas.

W. S. Monroe² found that young children give to musical sounds degrees of sustained attention quite out of proportion to the normal control of their activities, and often learn to sing before they can

¹ Educational Use of Music for Children under the Age of Seven. Ad. and Proc., N. E. A., 1900, pp. 397-402.

² Tone Perception and Music Interests of Young Children. Ped. Sem., 1903, vol. 10, pp. 144-146.

talk. Rhythmic measures of tonal kinds very early cause pleasure and pain. From data concerning 161 children under six, he found that 29 of the boys and 49 of the girls could be taught to sing the scale. From four to five years, 34 per cent of the boys and 59 per cent of the girls could learn it. At six the proportions were boys 41 per cent, girls 71 per cent. Some could learn only a portion of the scale, difficulties with the upper notes being greatest. Some are limited in the perception of high tones. Children were also taught to sing simple songs and a fortnight later to reproduce them, which 50 per cent of the girls and 63 per cent of the boys did. The memory of songs exceeds that of scales, although it is more complex. This is due perhaps to rhythm and to association with the concrete subjects of such songs; 27 per cent of the boys and 59 per cent of the girls seemed to have special tastes for music, the male curve dropping as age advances, while girls' interest rises. Zufall found auditory defects 20 per cent more common among males than females in Germany, and D'Espine, in France, found deafness 22 per cent more common among men than women. In the private schools for the deaf in this country there are 10 per cent more boys than girls. Jastrow and Morehaus showed that women students' hearing is more acute than that of men. All this indicates feminine superiority in tone perception and musical interest, although women have done little in musical composition.

Alice B. Gomme has collected and edited ancient movement songs from English children and prints them with copious annotations, music and illustrations, in an interesting series.¹ Most of these consist three-fourths or more of repetitions, or perhaps the successive verses have only one word different in each. But there is a great deal of movement and rhythm, and otherwise much imaginative and mimic action—milking, riding, weeping, dancing, dandling babies, washing, ceremonious salutes, ancient rural games, often with intense emotional coloring, drinking, murdering, loving, and death. There could hardly be a greater disparity between these and the more recently made games and plays for, of, and by, children.

Charles E. Keyes, West Brookfield, Massachusetts, has for several years studied and recorded the progress made in musical education. He usually taught from thirty to fifty rote songs each year, beginning with thirty in the first and reaching fifty in the third grade. In rote work the child follows a good form of music far better than the jangle usually taught. Words in music are the chief difficulty; if they are too old there is trouble. In songs about animals, trees, devotion, nature, patriotism, motion, children are at home. Absolute pitch is of no account. A little work cures all those who first sing in monotone. One boy learned to sing correctly holding his music upside down. At the sixth grade, too, practical music sense is well established. Sometimes the nasty and most

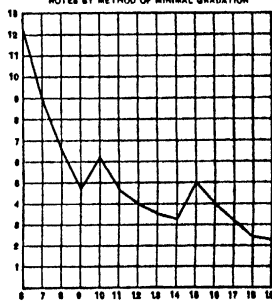
¹ *Children's Singing Games*. Nutt: London, 1894, 70 p.

day. Little rowdies prefer the softest and sweetest songs. Boys who have not been taught to read music usually lack interest in it. From a vast number of tests made Mr. Keyes found that of 28,225 who sang, 74 persons sang correctly. This difference was far less between boys and girls than had been supposed. Boys and girls usually prefer the music to the words. Individual methods are specially commended. Mr. Keyes's exhibits show great progress. In the third grade the first test in individual singing showed that out of 235 pupils only 45 failed. In another exhibit out of 375 only 37 failed. This, so far as I know, is an unparalleled record. The test was confined to the ability to read and sing music at sight alone. In the choice of songs the ethical led, then came those of patriotism, nature songs in a minor key, and the seasons.

J. A. Gilbert¹ experimented on the comparative power of discrimination between notes by the method of minimal gradation. Each experiment was composed of two tones and a judgment as to their likeness. The tone varied from was A (equals 435 vibrations of the international pitch). The variations were in 32nds of a full tone. First A was sounded, then one, two, and higher, until the child several times decided that the second tone was different, ten experiments being made on each child with a tone tester. Five boys and girls of each age from six to nineteen were thus tested. The results are shown in the following table, where the figures on the horizontal axis indicate ages and those in the vertical column represent the number of 32nds of a tone required to produce the sensation of difference. We thus see at first the rapid increase of discriminative power from some twelve to five 32nds of a note between six and nine years of age, and from that age to nineteen there is a total improvement of only two 32nds of a note, with years of deterioration culminating at ten and fifteen, due perhaps to teething and puberty respectively.

Only three needed more than half a tone. This increase was very great until nine, and then to ten there was a rather marked remission, and another from about fourteen to fifteen. With these exceptions the curve is rather smooth and asymptotic. To verify the expansions at ten and fifteen, tests were made on other children,

COMPARATIVE POWER OF DISCRIMINATION BETWEEN
NOTES BY METHOD OF MINIMAL GRADATION



¹ Experiments on the Musical Sensitiveness of School Children. Studies from the Yale Psychological Laboratory, 1892, vol. 1, pp. 80-87.

but this general result remained. A similar period of augmentation appears to have occurred at twenty, after which it drops again as before.

A very interesting study was made by Fanny B. Gates.¹ Two thousand papers from one hundred boys and girls of each age from seven and under to sixteen and over, as to their favorite songs were collected and classified. The largest class was social, including folk, negro, home, school, and love. Under seven these were often lullabies. Home songs gradually decline up the grades. School songs, beginning with 43 per cent each at seven years, fell to two per cent in girls and five per cent in boys at sixteen. Negro melodies were twice as often favorite with boys as with girls. Religious songs increased in general up the grades. Patriotic songs attained their maximum of 29 per cent with girls at twelve, and 40 per cent with boys at fifteen. The choice of songs on account of words in general decreases with age, and music comes to the fore. Rhythm begins as a dual balance, and in its simpler forms is always based upon two. Perhaps if we had three arms and legs triple measure would predominate. In recalling music rhythm often comes first. It gives a sense of movement. Very young children sometimes have strong favorites because of the lilt. The bushman sings in his dance till exhausted, and from this grows the symphony. Chorley says national music was derived from dances. Patriotic music was chosen by 18 per cent of the boys and 17 per cent of the girls, boys being most interested in history. Among the Sandwich Islanders their history is preserved in song. This is true in Greenland and in Africa, where wandering minstrels glorified the chief. Spencer says national airs are affected by the intonations of speech. This seems true of Italy and Scotland; but some savages have pleasant language but rude music. Association with special scenes frequently determines the choice. Gurney denies association except as a merely intellectual process. Some are almost visionary and some always think of motion in connection with their favorite songs. Some have chills and shudders, stand on tiptoe, etc. Mendelssohn said that music expresses things too definite for words. Words mean different things for different persons, but song can awake only the same feeling in all. Music exists only inside the subject. Galton found a great falling off in the power of hearing high notes with age. Small dogs could hear high notes; large ones could not. Cats excelled in this. Binet found twelve per cent had colored hearing.

Children often prefer certain keys and rarely minor ones. In southern Mexico the jolly songs of the natives are sad, and their merry ones seem to us melancholy. Australian music chimes in with the words. The rudest forms have some scale. At first, intervals less than one tone were avoided. In the Stone Age instru-

¹ Musical Interests of Children. *Journal of Pedagogy*, Oct., 1898, vol. 11, pp. 265-284.

ments corresponded to part of our diatonic scale. Engel thinks the pentatonic scale easiest for children. Waterhouse found a gibbon singing the chromatic scale, and another writer found a bird that sang down eight to twelve true notes. Cheney says bird music has the same intervals and uses major and minor keys. He believes that with a good ear and equal chance, two persons, no matter how far apart, would develop similar taste and perception for music. This is pedagogically significant. Reisman thinks folk songs best for children. Music should fit the mood. We should not teach spring songs in the fall. Becker, of Berlin, says the child on leaving school should know thirty songs and one hundred chorals by heart, and this is better for most than all the power to read music which the school can give. Notes should come in the middle of the grammar course, but singing first. Home, school, church, state, nation, can be thus trained.

In Asia few traces of original music can be found. One writer says ancient Indian music has been lost save a few pastorals. Mohammed thought music a device of the devil to ruin man. Liszt says all Hungarian national music is pure gypsy, or borrowed, or stolen. Another thinks the law of accent is the same in Hungarian music and language, and opposed to that of the gypsy language. Our Indians are very musical. Among the Damaras in South Africa the highest ideal is to imitate galloping horses. Rhythm predominates over melody, and music is associated with intense exercise. The Papuans have a kind of Meistersinger school. Certain songs can be sung only by those of certain rank, and physicians attend their patients to the accompaniment of music. Convalescents must sing several hours a day. In many primitive people the male voice is high. Berg thinks it was so in primitive man and low voices are a late development. Wallaschek doubts this, for savages would have had female voices since boys' voices fall. But he attributes high pitch to excitement.

Darwin thinks music and rhythm originated as a sex charm. It excites tenderness, ardor, war. Spencer derives it from emotional speech. It awakens dormant sentiments of which we had not conceived the possibility and do not know the meaning. They appear like mental reversions to the emotions and thoughts of a long passed age. Perhaps the power of music has been sublimated out of coarse excitements to higher emotions which we can no longer explain. Wallaschek dissents from Darwin and Spencer that music grew out of speech or that the original music was love song transmuted. He says only music can tell what it expresses. Hudson says the song of the male birds on La Plata during the pairing season is feeble and sketchy, interspersed with love antics; but only after the mate is chosen are songs melodious. Hence he thinks that conscious sexual selection on the part of the female is not the cause of music and dancing performances of the males, nor of the bright colors and ornaments that distinguish him. Wallaschek thinks there is no

speech in songs. It arises purely from the rhythmic impulse. Time preceded melody. Music expressed emotions and stands to speech as drawing to writing. Gurney thinks the vocal expression of a particular emotion came first and then followed vocal expression in general. The vital element in emotion is its idealized rendering. This Sully denies, claiming that melody is the essential part of music and is a fusion of rhythm and pitch. Music rather than poetry is the happy art. "It gives to children nothing but heaven."

As to reasons for their choices, children in the Gates study were usually unable to express themselves except by saying because it was sweet, lively, fast, sad, etc. The sense of rhythm was very prominent. The swing and lilt and possibility of using the music as a dance was often expressed. Older children dealt often with patriotic reasons. This suggests how primitive people often develop traditions based upon history which are preserved in song, and chant the deeds of their ancestors, or how wandering minstrels glorify their chief. Association was one of the most interesting reasons of preference. The whip-poor-will suggests a country home. A southern song revives familiar scenes by those whose early home was in the south. Other songs suggest the hills, sea, flowers, birds, bells, winter, midsummer. Several specified that in different moods they enjoyed different songs.

In this study a number of interesting cases of colored audition were found. Vowels have most color, while consonants are faded. A is usually red. One lady saw green when she heard Haydn, blue when she heard Mozart, yellow on hearing Chopin, etc. When she hears an oboe she sees a white pyramid; on hearing a 'cello or a trumpet, sees a flat, undulating ribbon of white fibers; in an orchestra when the violins strike up she sees a shower of white dust. Some see mosaics. Only a few prefer minor songs or have preference for keys.

E. L. Norton¹ says music must conform to the actual present interests of the child and to the potential adult. The best songs are those in which most are interested and whose effects last longest. One function is to unite child and adult and not sever them. The earlier songs should be simple, not complex, possibly on the five-note scale, with bright tempo, allegro rather than adagio, the two-rhythm rather than the three-rhythm, closely related to life, etc. There are humorous songs like those of Taubert that are refined and classic. Perhaps no rhythm is bad in itself, although some arouse and others soothe and intoxicate. The two-step rhythm arouses animal spirits, puts vitality into motor play and subdues everything to its own form. Good music may be adapted to children's needs if this is skillfully done. Old music, hymns, ballads, lyrics, and love songs, if connected with religious sentiment, as, for instance, bywords, are to be commended.

¹ The Selection of School Songs. Elementary School Teacher, 1904, vol. 5, pp. 148-158.

E. K. Fairweather¹ holds that music is the chief expression and method of training of the heart and all the sentiments and emotions. The lack of it makes men desiccated and unhearty and, though they may be smart, leaves their emotional life shallow and dry. If the feelings languish the imagination does so. Music teaches by contagion and like poetry "lifts the veil from the hidden beauty of the world." It keeps the soul in relation to the deepest realities and gives a medium for expressing what is felt. Perhaps the fundamental trouble in teaching music to children is the lack of appreciation of rhythm. Harmony is akin to law. The author thinks children might attempt little musical compositions of their own as a mode of development and expression. Busy hours take care of themselves but we should chiefly be anxious for the child's leisure time. We greatly lack healthy and innocent recreation. As a universal language music transcends all differences of age and culture and makes for social unity. Never has the world needed music so much as to-day. It is a moral law and gives the soul over to the universe, the ideal of order, and suggests the invisible.

Max Meyer² thinks the chief object of musical training should be to make the pupils enjoy music rather than to read notes or sing and play. It is often hard to understand a complex musical production like a sonata, and he advises the aid of visual sensations, and especially approves Høvker's scheme. His pictures are used at the first instruction to call the pupil's attention to the fact that every song is composed of partial tunes or phrases, each of which is represented by a figure. These pictures, however, help far more in helping to understand coexistence than they do succession. Very young pupils can thus associate figures with tunes.³ As a result of much experience and labor, he has devised a graphic scheme of presenting music, particularly fugues and sonatas, to the eye. For this purpose he dispenses with all but the heads of notes and connects these by lines, omitting all time signs, and carrying the chief theme in a form picture. He often, too, dispenses with one, two, or three lines of the staff, so that his scheme slightly suggests the holes in a pianola roll connected with lines. By supplementing this method with colored dots and lines and by the occasional use of small circles, it is possible to represent one, or, indeed, a number of parts and instruments in an orchestra. Verbal explanations appended show the leading motive, subordinate phrases, elaborations, and the various other divisions. By this means those who do not read music, it is claimed, are able to follow it more intelligently and to recall the chief motives. Their

¹ Psychological and Ethical Value of Music. *Adr. and Proc. of the N. E. A.* 1902, pp. 621-625.

² How a Musical Education Should be Acquired in the Public School. *Pedagogical Seminary*, 1900, vol. 7, pp. 124-131.

³ Die graphische Darstellung als Mittel der Erziehung zum musikalischen Hören, von Robert Høvker. *Otto Schulze, Götten*, 1899, 31 p.

attention is called to symmetry, opposition, reversal, and other æsthetic elements, and particularly for those eye-minded, and also for those who desire assistance in penetrating the mysteries of musical theory, it may be of assistance. It is urged, too, that young children by this method are able to apperceive and intelligently appreciate a much more refined and advanced kind of music than would otherwise be possible. Of course no one can judge the merits of such a scheme without considerable observation of its actual working in practice. It has, however, interesting suggestions for the psychologist.

J. Courtier¹ tested musical, which had nothing to do with acoustic, memory. There were nine association types between hearing, sight, word, feeling, motion. These conservatory pupils showed that a good musical memory demanded not only sharp correct musical hearing, but also a good voice. Those with good tones and memory were often weak in rhythm. Most could reproduce pitch and accuracy, others were weak in it and also in intervals, which they could not evaluate. It is hard to tell whether in these reproductions hearing or motor concepts or both were effective.

Kratz² had three selections of very different character played and asked high-school pupils to note and later to write down the impressions each piece gave, and to give it an appropriate title. One represented the mad pranks of the harlequin and was rightly interpreted by a great number. A cradle song was most difficult, perhaps because the sentiments were not adequately conveyed by the composer. To meditate, muse, be soothed, and hear a lullaby, opens the heart to many emotions. Girls had more natural views on music and understood their inner selves and discriminated more closely in their attempts to portray feeling than did boys. A wide range of both sensations and emotions was aroused, such as the impulse to dance, feeling nervous thrills, muscles twitching, happy moods, desire to run a race, do a great deed. Many could not express the impressions aroused by the music. Perhaps much, normally too deep for words, can be uttered by practice. At any rate, it helps us to become acquainted with emotions, longings, yearnings, that are too deep for words, and thus may aid us to shape our characters more intelligently.

Gaiffe³ holds that the end of musical instruction is first to educate a very small number of musicians well; and secondly, to so train a large number that they can hear and enjoy the great masterpieces of music.

¹ Communication sur la mémoire Musicale. III Internat. Congress f. Psychol. München, 1897, pp. 238-240.

² Study in Musical Interpretation. *Adr. and Proc. of the N. E. A.*, 1900, pp. 590-591.

³ F. Gaiffe: *La Musique à l'École*. In *L'Éducateur Moderne*, July, 1909, vol. 4, pp. 308-318.

The data collected on the effects of barbaric music on civilized children are unsatisfactory. Many children have heard Chinese, Indian, and other crude music at exhibitions, etc. Some think it a joke and very laughable, some are simply bored; to others it is unpleasant or even distressing. To some it is monotonous, and makes them sleepy; a few love it all very much. And some feel, as a high-school girl expressed it, that they would like to "shake off the dust of civilization and get back to nature and be at home." Mr. Farwell's harmonized and adapted Indian music, which is perhaps less "sophisticated with culture than Longfellow's 'Hiawatha,'" he reports as pleasing to children; and Natalie Curtis's singing of the Indian songs noted in her fascinating "Indian Book," which is far more aboriginal, is as charming to hear as Alice Fletcher's Sioux songs or Cushing's Zuni melodies, if such they can be called, are to read. All this has a charming novelty, and excites curiosity in old and young. Savage music differs very widely in both kind and degree of development. From rhythmic noises to music which follows laws that even seem to us as much more complicated than those that underlie modern music as the grammar of savage tongues seems more intricate than that of English, is a long way. Even a slight degree of musical culture on the part of the child tends to make primitive music seem stranger than it otherwise would. If we could grade the latter from lowest to highest along the genuine phyletic scale of development and expose an untutored modern child to its stages, we should then, and only then, be able to answer the question how crude native music affects our children. Till then this *rapport* between ontogeny and phylogeny must be left in abeyance. Approximative data could now doubtless be collected that would give valuable cues and suggestions. Meanwhile my own impression is that there are rudiments in the child's soul that will respond to, and could best be developed by, some of the crude elemental music, when we really know what is most typical of it, and what age it fits best, and that even old folk songs, and far more the usually babyfied music in our first courses, now force the child to skip an important stage in its indigenous musical evolution which could be made good use of, and the present expression of which is a lost chord between the child and the race which we should

seek to restore in the interests of humanistic musical culture. Present methods isolate music too early from its broad nourishing basis of rhythmic movement, action, cadenced inflection, and feeling generally, and make it an independent cult, specialized and, worst of all, technical, before it has performed the supreme function of its nascent state in cultivating the emotional life, and, if not creating, at least conserving important factors of it.

Music in the modern sense is one of the hardest and latest as well as one of the most intricate products of human culture, and this fact must be invoked in addition to lack of training in order to understand why we find children at every stage of undevelopment and arrest, from amusia and musical idiocy up. Our returns abound in cases like the following: a bright, witty, but cold, selfish girl of fourteen cannot sing at all, and has no idea of pitch; a bright boy of sixteen never sang or whistled; an only child of twelve with peculiar ear defect seems unable to tell one note from another; a boy of fourteen could not sing at all, and apparently had little idea of what music was, but by diligent training sang fairly well at sixteen; a boy of seventeen persistently sang in monotones, singing louder where he should sing higher in pitch, but had a fair sense of time; a boy of fifteen sang up and down the scale when others singing with him did, but varied four or five notes only, so that, where there were high notes, he sang several tones too low and *vice versa*. Music is painfully exciting to some, who are made cross by it. Some distinguish tunes of similar character, like church tunes, chiefly or only by words; otherwise all tunes are alike to them. Some are essentially indifferent to or are bored by music. Frequently young children can be taught to keep time only with difficulty and cannot march with others, or can do so only by rocking their whole body, watching the step of their mates, and fixing their whole attention on it. Very many more have but languid interest in music, and hardly ever any feeling or appreciation for it, although doing the school work fairly well. These are samples of many cases reported by teachers of music in schools. More study of such cases is greatly to be desired both for science and for pedagogy. While some of these children are exceptionally bright in other things in a way that suggests

compensation, it would seem that most have either some auditory, vocal, motor, or mental defect, or that they are especially prone to be deficient in sentiment, heart, and especially in the capacities of keen social sympathy with others. Some of them having heard very little music, and never having sung, simply lack training, but there is no ground for asserting that no child would sing if it had never heard others do so, nor is there for denying this statement. Many asseverations of enthusiastic teachers to the contrary, there are no doubt congenital musical diverts and even imbeciles. Would savage music appeal to such children, and are they simply lingering in some paleopsychic stage? Is the slight progress they are capable of making worth what it costs? Above all, we would like to know what other psychic effects usually accompany this, and what are its most flagrant causes. It is high time that psychogenetic researches were made in this very promising field.

Precocious gifts are more common. Juvenile prodigies, though rare, are better known. Here, again, a few samples from our returns must suffice. A girl of ten months beat time accurately to even complex music; another in her second year learned to sing many tunes and "had sung before she could talk"; another of two years chimed in with a shrill, piping voice to most of the music habitually heard in the family; another had sung several tunes correctly alone, and often tried to pick them out on the piano, and would listen long and intently as to nothing else; a boy of four who had had no instruction knew and hummed some two score pieces of very different character; a girl of five sang nearly all she said, and kept it up at her play about all day, answering questions in crude rhythmic songs of her own improvisation, her converse with her doll and other children being mostly in song, etc. Some before school age acquire considerable familiarity with the scale and various tempos, and even sing solfeggios and have a highly developed sense of rhythm, this being more stressed with boys than with girls; but musical precocity in general is more common with girls. Here, again, we need more detailed knowledge. If such children were usually found where much music is heard, this fact would suggest that all children may have musical capacities more early than is generally thought,

which might be developed sooner, and more than we now suppose. Such gifts are often not hereditary, but appear like sports, as in the case of mathematical genius. Again, such early talents very often die out, and in at least some of our cases the interest in music is practically lost at or even before maturity, and far more often there is so little depth of soul that taste for good music cannot be cultivated. Child compositions are usually trivial or affected. Where rhythm is prematurely and disproportionately developed it seems ominous for the growth of music sense above the order of march or clog dance. Still, as a class, these cases need and most often repay such efforts, although many infant singers fail to develop voice, and some of them seem without the basis of temperament. Reading music, especially for the piano, seems from our returns to be almost a gift with some, while others attain even moderate proficiency with great difficulty. Thus, in fine, every stage of life seems strewn with wreckage, and if there is early promise it is often succeeded by early decay. Musical ability is a delicate and uncertain plant, the blossom of which by no means insures fruitage. Possibly its culture was for long prehistoric periods a specialty, till it became, Weismann to the contrary, notwithstanding, more or less hereditary, and in subsequent mixtures of blood its determinants, having attained a certain cohesion among themselves, were crossed by some hyper-Mendelian law in the psychic sphere which has few analogies in psychic experience. But speculation here is worthless in the present stage of psychogenesis.

Nearly all my own answers to syllabi agree that weather has much effect on voice. Hot and damp days cause children to sag, lose pitch, sing flat, perhaps relax toward monotone, and lessen vocal control. Bad ventilation has the same tendency. Conversely, in bright weather and pure air, voices are less languid, more resonant, truer, stronger, and even reading music is distinctly improved. Teachers often say that everything affects the voice, and even urge that, to be effective, every condition must be favorable, or singing lessons should be omitted. Naturally, to sing goes with joy; therefore, a buoyant tone should be another precondition. Too much praise or blame, especially if individual, have bad effects which are detailed at length. Children should not be made early conscious of the quality of

their voices by criticism. This is specially dangerous at the period of change of voice. Notes grow more chesty and less throaty. Girls often lose a few high notes for a time and regain them later, requiring from one to four years for perfect readjustment. They often think themselves hoarse by spells, especially on cool days. Some alternate repeatedly from the old to the new register, and some drop suddenly. Boys' voices are best about a year before the change. Choir boys often sing through the entire change, dropping from soprano to mezzo, then alto, then baritone. Although girls' voices change less, the change is quite as critical and some think more so than for boys. The majority of our respondents think most children can sing through mutation with the same impunity with which they can talk, and that the only danger lies in maladjustment of pitch to the stages of alteration in larynx and chest. A very few opine that this is a nascent period when new vocal powers are given, which are lost if not utilized betimes, so that this period is a judicious teacher's great opportunity, which, if neglected, involves grave loss of possibilities never so open before or after.

Singing is at first best learned by imitation, and a good collection of songs by rote should always come before all exercises, scales, and intervals, and long before note reading, which is a purely intellectual process. Children get a better grasp of pitch, rhythm, etc., if melody is not distracted and harassed by notes. Notation comes very late in the history of the race, and it is just as monstrous to teach it before the child knows many songs by heart as it would be to teach reading before the child had a vocabulary or could speak. These, the analogies between alexia and agraphia on the one hand, and the various forms of amusia on the other, bring out in the clearest way when these defects are analyzed.¹

¹ Wallaschek, Richard (Die Bedeutung der Aphasie für die Musikvorstellung. In *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, September, 1893, vol. 6, pp. 8-32) has shown that there is a marked parallelism between certain groups of aphasia and certain forms of defect in musical expression and that some of the same defects that exist between writing and drawing, are found between speech and singing. Under expression, for instance, there is motor or sensory amusia or paramusia and musical amnesia. There is also musical agraphia and paragrafia, alexia and paralexia, amimia and paramimia. In the field of musical representation we have to choose between three theories: first, either the localization view of Hitzig;

By persistently ignoring this principle, most American teachers and texts commit a crime against the child's musical nature which is responsible for most of the difficulties they encounter, and which creates defects, dulls interest, violates gifts, and handicaps work to a degree which, could it be measured in financial or other terms of economic waste, would be appalling. The American pedagogue finds it vastly more congenial to his, or usually her, instincts to grind the children on musical script than to teach them to sing by the ear, and so he does it insistently. If a visitor seeks to learn how the class has advanced in its musical education, the book is at once called for, and its grade, or the number of pages or exercises learned, or the facility at sight-reading of a new piece is brought forth as a test of proficiency, and the quality of the music, which should be the very first, is usually the very last, consideration. Most school children will never learn to read and will rarely sing a note after their schooling is ended, but if they are left

second, we may separate the intellectual and emotional expression, or third, the entire process of expression may be analyzed into its components. These views, of course, do not entirely exclude each other. When it comes to analyzing musical concepts we have great diversity of view, which is because we have to raise the question of the origin of music which is usually placed where its own concepts find their strongest association. Then some have derived music from speech, others from dramatic action, still others from dancing, others from the feelings, especially love. Wallaschek derives it from the tact or time sense, which is closely connected with rhythmic movement. The correctness of this derivation, he thinks, will not be darkened or disputed by those cases of aphasia in which it appears that the musical conception and production are composed of different elements.

Brazier, Dr. (*Du Trouble des Facultés Musicales dans l'Aphasie*. In *Revue Philosophique*, October, 1892, vol. 34, pp. 337-368) concludes that the theory of three images can be applied to music. Auditive images predominate more even than they do in speech, but motor images are more prominent than visual. The Knoblauch view that there were nine types of amusia has not held good. But there is a useful distinction between total or complex and simple amusia; the latter may be grouped into those of reception, of transmission and of expression, corresponding in the auditive field to tonal deafness, in the visual to total blindness or musical alexia. The other forms are due to the loss of motor images, whether of singing (vocal motor amusia) or in playing instruments (Wallaschek's *amimia*) or instrumental motor amusia. This scheme seems simple and with a broad clinical basis. Amusia may be a corollary of aphasia or be an independent species of it.

G. Marinesco (*Des Amusies*. In *La Semaine Médicale*, February, 1905, vol. 25, pp. 40-52) gives an interesting sketch of aphasia in its relations to amusia, showing that for some decades alienists have noted the close relation between speech and music, the latter being a language "more energetic than speech." The acquisition of musical and verbal images and their reproduction where *disaggregation*

with a goodly list of well-chosen songs which they love, their sentiments would be developed and their taste formed, and most would love music ever after, even if they had never earned to read a note. Of the few teachers who accept this principle, there is no agreement as to the proper time for learning the notes, the ages proposed ranging all the way from seven to fifteen. The custom of having grade teachers give instruction in lower classes, and perhaps the fact that we as a people are not musically gifted, and the traditional neglect of what the plain and simple knowledge of child nature should teach, are largely responsible for the above unpedagogic practices.

Tonic Sol-Fa has contributed little of value save the movable *do*, but adds distractions galore. Like other novelties, it brought enthusiasm to teachers in the days of Kullen and his immediate successors. But the analogies with colors and hand movements were utterly arbitrary, and the diagrams appealed

occurs follows very similar lines. As Balle puts it, "auditory musical representations are usually organized before those that are verbal and the latter disappear first. That is, verbal deafness in disintegration normally comes before musical deafness." "Music thus presents a very close resemblance to language. Both are symbolic representations. The note or musical symbol can be mentally sung, heard, read, written, just as the letter which is the phonic symbol or as the word can be pronounced, heard, read, written. The cerebral process is absolutely the same and the similitude in education is identical just as for words."

Still more interesting is the contribution of Pick, A. (*Zur Analyse der Elemente der Amusie und deren Vorkommen im Rahmen aphasischer Störungen. In Monatschrift für Psychiatric und Neurologie*, 1905, vol. 18, pp. 87-96), who urges that for a complete understanding of aphasia and to fully rubricize all the now well-recorded cases it is essential to consider those in which the music *sense* is either congenitally lacking or has been lost. This writer gives a brief review of the cases of amusia described since 1879. Tones consist of quality or pitch, intensity, timbre and rhythm, and it would appear from this literature that any of these may be lacking. Even Billroth in his oft-quoted "Wer ist musikalisch?" described cases of innate absence of the sense of rhythm in normal individuals, while it is sometimes very highly developed in low-grade idiots. There are certainly well-recorded cases in which all understanding of rhythm and melodic intervals, together with all motor expression of musical feeling, seem lacking. There are both deafness and aphasia of intonation. In some cases this seems connected with asymbolism. The facts, however, are so complex, and the clinical material at best limited to so few dozen cases, that it is impossible as yet to give a complete theory of the complications here involved. It is certain that amusia and aphasia are very closely related and analogous. To develop the schema in which both belong it is therefore plain, as Pick concludes, that we must "pass from the hitherto one-sidedly emphasized intellectual to the adjacent domains of feeling and will."

only to the intellect. The less allotropic matter carried along the better, and every appeal to the eye save for rhythm diverts from ear and voice culture, in which all should focus. Tonic Sol-Fa may really help experienced singers, but the principle often invoked, "if the staff is hard, put it early," is here at least perverse. Signs and symbols and all that mentalizes should be everywhere subordinated to what emotionalizes.

(1) Rhythm is the first aspect which is so emphasized in all the primitive music, which seems to have a tum-tum origin. Its chief features are repetitions and cadences. It is a system of beats, accents, stresses, time keepings, and markings, stepping, patting, tapping, striking, measuring arsis and thesis with the feet. At first there is little content and little variety, but repetition exasperatingly monotonous to cultured nerves. A savage band is made up of drums, at first untuned, and, if there is a choir, it repeats phrases and words endlessly. The child which begins by rhythmically striking one object with another, or by keeping tab of sequent impressions on tallies in a series of light objects when getting ready to count, hums or verbalizes a measure over and over, perhaps slowly evolving and intrincating it, or learns to beat time, march, sway, or gesture, has begun to ascend the long way by which the race began its musical development. This stage needs great and early emphasis; although, on the other hand, it may become excessive and neurotic, as is seen in the counters and beaters. Poetry is older than prose, and everything possible in the kindergarten and primary grade should take rhythmic character. Rhythm in any form most children love, and clapping, patting juba, marching, moving in tempo, metronomes, swings, rocking chairs and horses, are favorites, although some in our data are made ill by the three latter. Lack of rhythm often goes with general disorderliness, and excessive love of it often makes children prefer catchy, trashy music if it has a strong lilt and swing so they can pat, nod, beat time, etc., as the gallery in the theater is so prone to do. Cradle and leg time, arsis, thesis, the tendency to count in groups, to hum with steps, etc., all tend to articulate and cadence the very soul. The weaker the rhythm sense is, the more massive and fundamental are the movements necessary to learn it. It has social value in strengthening unison of movements and, from these, of

sentiment. It is difficult for children to feel music without movement, so that dancing is a needful auxiliary at a certain stage of musical education, which some are now coming to think is dwarfed without it. Even musicians often hear music with at least periodic motor innervations, and the conductor's baton may help to understand new and difficult passages, for all music is pervaded by temporal pulsations which both punctuate and articulate its elements into higher and more compound unities. A cardinal trait of music at this stage is, therefore, that it should be marchy, dancy, motor, for it must get into the muscles. While the child may hear other music, it should attend chiefly to this kind. To exercise together without music is the ghastly mistake of Swedish gymnastics, which sins against both motor and musical development. Music should go with steps and steps with music. The young person who cannot dance is crippled in his appreciation of a certain large class of music. There are those who interpret almost all kinds of music in terms of motion, supplementing real by imaginary movements. The sentence, sense of power, all periodicity and style in speech, grace, ease and freedom, which are the poetry of movement, find here their chief source. To sit still and listen to stirring music stunts a musical development in a young child in its very bud, for it feels music chiefly as incitement to action. There have been great and precocious musical geniuses that have shot up through this stage so rapidly that it was little seen, but it is integral in normal musical development, and the born teacher of the art best knows how to draw upon and utilize this immense reservoir of motor tendency.

The child best worth educating musically responds deeply and early, even if unconsciously, to the sound in nature, the first music master of the race. The sighing of the wind through the pines stands out uniquely in its effect upon the sensitive soul of childhood. It may even cause tears without consciousness, for it plays upon the very organism. It is felt in most as sadness and restlessness, while the susurrus of the breezes among the leaves of deciduous trees is early pleasing and exhilarating. The wind is a bandmaster, loved or feared, according to the loudness with which his orchestra plays. The rattle of the hail, the drip and patter of rain, the silent fall of

snow, the roar of distant and the crash of near thunder, the ripple of streamlets, the roar of waterfalls, the beating of waves, and all the many voices of water are great music teachers. Then, too, there are the symphonies of bees, crickets, and even mosquitoes; the humming, droning, booming buzz of larger insects, the piping of tree toads and frogs, even the cries of the *feles et canes*, each has a varied tone language of its own to the young; the bleating of sheep, the lowing of herds which give pastoral moods, the call of the wild and the cry of the squirrel kind. Above all, the birds, the lonely hoot of the owl, the despairing cry of the loon, the caw of crow and daw, the scream of the eagle and hawk, the clapper of the heron, the cooing of the doves and the song of the warblers, which one observer says never sing but only laugh out of a heart overflowing with joy; each one of these sounds and many more carry with them a whole stage setting of psychic moods; and these the tone poet simply must feel abundantly, often, and early. Living creatures do not talk to each other, for they have no vocabulary of words, but their utterances are all of them either love calls, warnings, or danger signals, and are more musical than verbal. Some are lullabies, others madrigals, or philippics, or notes of defiance, or murmurs of parents to their young, and some are voices of the day, others of the night or storm. They suggest the heath, the prairie, moorland, thicket, mountain, meadow, brook, the spring when the migrators come, and the fall when they go. These are the things that have played on the soul through all the immemorial past, have controlled its moods, and have still a strange power to call up imagery. Snatches of these field antiphones are, what many careful experiments show, that which music suggests to all responsive souls. It is these influences that should not be evicted by the music-stultifying noises of the city, which cause it to focus on erotic, even decadently erotic, themes. So far as music is an interpreter of nature, the child must have heard, felt, varied influences, or else musical training leaves him untouched, because there is nothing in his soul to interpret.

(2) Song is story, and to the child is the nourishing root of all musical culture. A musician who never sang, or at least hummed to himself or herself, can never possibly feel the full

power of instrumentation. He must at least hear song in his throat, or something vital is lacking. Song, too, must have a burden, and programless music comes later. The true bard is inspired by his theme and pours forth unpremeditated song, because he is drunk with his theme, and therefore carries his hearers away. So the great lyrists, from the restored Apollo to the gypsy fiddler of to-day in his own habitat, play music that to them is crammed full of meaning and content deeper than words, and with which they weave their spell. Hence, too, the musician must know the great tales of time and men, and be inspired by them, so that he can learn to let himself go with abandon; and his powers of sympathy must be utterly untainted by criticism. Story roots of love stronger than death, a vengeance where man is a powerless agent of the fates, of piety and devotion that immolate self for something greater than self—among these the composer finds his Muse. Hence, the pupil must know and feel the great mythopoeic cycles, especially those of the ancient Greeks, Homer and the dramatists; and the Germans, the Saxon *Arthuriad*, the *Niebelungen* and the rest. All such legendary and heroic lore cannot be properly told save in poetry and music, to which they incline and inspire the soul. Literature of this class should be the handmaiden of art. Above all, Biblical literature and the religious instinct should be cultivated. So, too, patriotism and the flag, the great historic events and golden deeds of virtue, home, and native land are the great themes in all the consensus of children's preferences in music. Love comes later, and comedy and parody are still later and far less.

(3) As to instrumentation, wind instruments that are blown come nearest the heart. The pipe was first after the drum, and to play these is singing with a proxy larynx, while breath and feeling are ordinarily very closely akin. Thus the young, even near the age of self-consciousness and emotional repressions, can still express a sentiment naturally. School bands are as hygienic for the feelings as they are for the lungs, and from Plato down all have praised martial strains of this kind for youth. But in soulfulness, we must agree with Gardiner¹ that the violin stands first, hard and late as it arose.

¹ *The Music of Nature*. London, Longmans, 1843, 505 p.

Each string has its distinct character. It requires and trains great accuracy of ear and touch, and bowing is the best expression of music which the hand can make. Perhaps in nothing does it come so near being the direct organ of the heart. How the Hungarian fiddler in his home and native music hugs passionately, caresses his instrument, and gets, as Paganini did, the most sympathetic and tumultuous response that ever instrumentalist won from a crowd! The violin is the school instrument in Germany, where most is done in music. The ready-made notes and tempered scale of the piano and organ are farther off, and their technic is far less expressive of the musical theme. The mandolin is a tasteful decoration of bric-a-brac for a sophomore's room, but is it quite virile for the American man? Is not even the banjo less ladylike and evirating? I do not know; why do not musicians tell us? Alas! the pedagogy of music is yet in its diaper and swaddling-clothes stage till we know more of the psychology of the chief classes of instruments, each of which does different things to the soul.

Keep the technic duly subordinated—pray, ponder this. Let me repeat: Is it not just as absurd to teach the children notes and the scale before they have learned a repertory of songs by rote as it would be to teach reading before the child learns to talk? The prime end of musical education in the grades is to train the sentiments, to make children feel nature, religion, country, home, duty, and all the rest, to guarantee sanity of heart out of which are the issues of life. To this, technic and everything else should be subordinated. Again, teachers must sing to the children if they can only croon or intone poetry. I would have a pianola in every high school and college with a few score of well-chosen selections. In pubescence, when the life of sentiment awakens, probably music has its most potent influences in stirring and expanding the soul. Much school music is now chosen merely with reference to some scheme of pedagogic, systematic progression. Much method here is a sin against the holy ghost of music itself. Every tune introduced should have a moral and æsthetic justification, and should be admitted to the school canon only after careful deliberation and for good and sufficient reasons. And then, and only then, will music be rescued

from its present abject degradation, and given its rightful, commendable place in the curriculum as the trainer of the feelings.

I wish music teachers would read a little more, and see their work in the larger light now dawning. They might at least know Pilo, Gardiner, Wallace,¹ Wallaschek,² possibly even Gurney,³ not to add Darwin, Spencer, and Weismann's dilettante and hypersubtle theorization. Then there is the second part of Helmholtz's masterpiece, "On the Sensations of Tone," which gives the history of music on a scientific basis. There are other works by Ritter, Paine, Henderson, Nerlich, Köstlin, Bartholomew, and Stumpf, who thinks that purity of music and race type come together, that the male voice was once very high, and that woman first began to sing, and that use or practicality has caused the development of music. Then there are the simpler results of the study of children's choices, from discriminations of pitch, from their range of ear, their sense of timbre, the imagery that music excites, which Gilman and Downey have studied, and even the responses of infants to music; while Dr. Theodate Smith is preparing a work on the psychic reactions to sound by infants and children, and fuller studies are being made upon imitation and upon musical imagery by Weld.

Under Mr. David Manners as conductor, one can now hear classical music at the Musical School Settlement on New York's East Side, where three hundred and seventy-five children from six to seventeen study under a faculty of thirty-two members and actually support the school. They fall into three classes: those who love music, those who find themselves in it and may become players in orchestras, and those who have ability to become teachers. The school is not open to the criticism sometimes made of trying to train musicians out of tinkers and tailors, nor does it cause dissatisfaction or interfere with school. For a fuller account see Tapper, T., *Music and East Side Children*, *The Outlook*, 1908, Vol. 88, pp. 428-432.

Interesting and curious was the production of the "Messiah" during Holy Week at Landsborg, Kansas, a Swedish town of two thousand. Twenty-five years ago Bethany College here instituted

¹ Wallace, Wm., *Threshold of Music*. Macm., London, 1908, 267 p.

² Wallaschek, R., *Primitive Music*. Longmans, London, 1893, 326 p.

³ Gurney, Edmund, *The Power of Sound*. Smith, London, 1880, 559 p.

this performance, which has become an annual festival which some fifteen thousand people have heard. There is a chorus of six hundred voices and sixty pieces. In one case three generations sang.

There are two ideals toward one of which most conductors tend.

- The one exhorts to beauty of musical structure, loves composition as fluent architecture, makes the texture of the counterpoint or brilliancy and mellowness of instrumentation or melodies works of fine art. The other exhorts to intensity of emotional effects, gets as near as possible to pure feeling, conveys mood, seeks expressiveness, sways the soul by strains of invigorating dance music, thrills one with rhythm, brings great climaxes. Each extreme has its defects and its virtues. Naturally Boston inclines toward the former.

Dr. L. Wüllner, whose singing has been received almost as enthusiastically as Paderewski's playing, has a voice of poor quality but is a marvelous musical and dramatic interpreter of poetry—the poetry of thought and music and words, and the music of poetry. He has certainly remarkable intellectual power of emotional insight and dramatic expression so that his voice is in some sense a subordinate accessory. His art is very versatile.

Arthur Whiting, a well-known pianist, composer, and teacher in New York, believing that colleges do not recognize music enough, some two years ago formed a plan to enable undergraduates to hear eight concert lectures on classical and chamber music. Attendance was to be voluntary and without charge, but expenses were defrayed by collections from the alumni. These were well attended, and considerable information, biography, history, as well as explanations of thematic and poetic construction, were brought out. Nevertheless, the real success of the enterprise is doubtful, though it seems to have great possibilities.

We persistently and with stupidity ineffable assume that musical education is all in performance; and every child up the grades is mechanically trained in proportion as it can sing or play. A critic or even a hearer of music is always asked if he can play or sing; and, if not, his opinion is thought of little account. Now this is just as absurd as it would be to estimate the child's literary knowledge by what it can actually read itself. Over against all this lies the far wider domain of musical appreciation. Children should, in fact, hear vastly more music than they sing or play; and this should be a prominent, if not a predominant, part of their musical training. They must listen and be taught how to do so by abundant experience and practice. Everyone available should sing or play to them, and any and all the mechanical players should be laid under tribute. Even the hand organ has its genuine

uses, and is a real aid at a certain stage of musical development. There is now no excuse for the narrow, dense ignorance and inexperience of so many young people in this field. In every schoolroom where there is a piano there should be a pianola of some kind, and a very carefully selected collection of rolls, graded to each age and stage, and often used not only in connection with opening and closing exercises, but as the basis of education in musical appreciation, so that musical ideas, phrases, motives, composition, and analysis should be progressively known. More of this, even at the expense of a good deal of the time now given to note work, would bring far more rapid progress; and, what is more essential, would secure more of the chief ends of musical education in the way of developed taste and experience. It is amazing, in view of the great value of results that lie so near at hand, that I have never seen or, after some inquiry, even heard of a single school that has not only added the pianola as an essential annex, but developed a strictly graded pedagogic course in musical hearing. One reason, I am told, is that the ladies who usually play the piano are jealous of the larger rôle of pieces and better execution of these machines. Here, again, the rights and needs of children suffer from the ignorance or caprice of adults.

(a) As to musical instruction in college, musical culture in its large sense is the most liberal and humanistic of all studies, perhaps not even excepting literature. From this, it follows that there is no subject in the high-school and college curriculum that should be taken by so large a proportion of students. About every young man and maiden should do something with it. Why do I make so large a claim? Because, as we have seen, music is the language of the feelings, sentiments, and emotions; or, in a word, of the heart, and because these constitute three fourths of life, and all of them come into being or are immensely reinforced and augmented during adolescence, which covers all the early teens and the very early twenties. Speech is the language of the intellect, but the feelings are older and vaster. The intellect is chiefly a product of the individual development, but the heart represents the race, and is hence more generic and basal. We Americans are more prone than any other race to be defective, *ungemütlich*, more liable to have our emotional life grow sterile and desic-

cated. Thus it is the function of music to restore, deepen, enlarge, intensify, and express. Our very language is prone to be deficient in action, feeling, and speech music. If we have feelings in youth, we soon come to deem it good form to conceal them, even if they are good and wholesome, although thought itself, if not painted and toned by sentiment, is arid and dead. Music makes the world tinglingly real again. It restores the soul to meanings, and the great tone poets who organized the sound world take us out of our narrowness into the universe and make us feel the cosmic powers. They add new and brighter colors to the palette of experience, and not only discipline the heart, but free us from false, frivolous, languishing, bad feelings, create new blends of them, and give us the more and fuller life for which we pant and of which our nerves are scant. Music, like God, sees only the heart. It is a language of quintessences, the only perfect philosophy and true metaphysics. Modern æsthetics shows us in great detail how national and historic music reflects the *soul* of races and ages—Greek, Italian, Teutonic, French, etc. In such phrases, which represent the essential viewpoints of Schopenhauer, Helmholtz, Gurney, Haweis, Stumpf, Hanslich, and others, how can we avoid drawing the momentous practical inference that more and better musical culture is one of the chief needs of our age and land? So my first plea is for more extensive musical culture, that almost all our academic youth learn to sing or play or, at the very least, be taught to know, love, and more intelligently appreciate good music in order to normalize and regenerate their emotional life, to make them feel country and nature in all their aspects, religion in all its breadth and depth, to sanify and idealize the affections and even war if, in the course of human events, it should become necessary to risk life for country. Relegate to the second or third place the technic that all teachers tend to push to the foreground, and constitute yourselves guardians responsible for the vigor and healthfulness of the emotional nature of the young. Break the iron law which tends in the kindergarten to put Tonic Sol-Fa in the primary school, intellectual instruction in staff, scales, and intervals in the grades, and the theory of harmony, counterpoint, orchestration, and instrumentation in the college and university ahead of wide acquaintance and

intimate heart-to-heart appreciation of a generous repertory of masterpieces. A German fifth-grade class I once visited could sing for me any one of fifty chorals or folk songs by heart, but could not yet read notes. How many of the great composers knew the intricate theories of super- and subdominant triads, dispersed harmony, inverted suspensions, or could have passed one of our college examinations in Spalding and Chadwick? Too much technic and too little early familiar acquaintance with music is the letter that kills. I know a high school that had a vigorous choral union of seventy instruments and voices combined, and which gave half a dozen concerts during the year of, on the whole, very good music, until a university hard by heard of it and decided to give credit for entrance examinations in musical theory, with the result that the half dozen leaders withdrew from the union (which soon collapsed without them) to study theory from books.

Some American colleges encourage banjo and mandolin clubs, composed usually of two or three crude amateurs who can snap off a few popular catchy and perhaps even "kicky" airs and a larger number of accompanists who can just play a few chords, and permit these organizations to give concerts and perhaps to make tours, occasionally contributing to their expenses. Often glee clubs are organized on a similar low level, who croon college ditties of the Polly-wolly-doodle or Mary's Little Lamb order. The fatuity and utter banality of the words and the cheapness of the music of the lowest strata of college songs soberly sung by rows of stalwart college barbarians in evening dress often suggest down-right infantilism. The fun of it all has a pathetic tang for every musical connoisseur, and when such clubs essay serious sentiments, these are all so crude and lush that such performances constitute a unique badge of our national (academic) inferiority in music. Institutions often think such concert tours valuable as recruiting agencies because callow youth of the home town admire and wonder, and are made converts thereby to the higher education. In the programmes there are usually samples of ragtime and of the latest, lightest comic operas to which admiring audiences beat time. Perhaps all this has its place, a touch of it but not too much of it, but it belongs to

the fraternity house or to the athletic field beside the college yell, or lower down in the high school. Its elemental rhythmic quality is basal as the tom-tom and has its place, but, like much of our school music, it belongs to younger grades. At any rate, most of the best agree that this is a musical level which the college should now ignore and which a department of music ought to discourage, because overcultivation of this stage is very easy, and, where it occurs, it tends strongly to arrest the higher development of musical ability. I am convinced that many American collegians are now suffering arrest from the hypertrophy of this crudest and most rudimentary form of musical propensity—and among these I must, alas, count myself.

(b) As to musical training for intending school teachers, great disparity is found even in colleges which have both a normal and a musical department. Some, even of the latter, make no provision for teaching music to the pedagogues that seek degrees from them, professors holding such work to be too elementary for them to engage in, or having no time for it. In most such institutions something, but too little, is done, and that little is almost always ill adapted to its purpose. In these respects we have very much to learn from the higher normal courses of Europe, and especially those of Germany, where the theory and practice are roughly as follows: The very first consideration is the sentiment taught or reinforced by the music, for here lies its chief educational effect, since it can train the heart as nothing else can do. The theme of most vocal school music is either nature, home, country, or religion, and its value is chiefly measured according to how much it can do in strengthening loyalty to these. Next comes the quality of the music itself, and of course all the works of the great composers are ransacked to compile from them a curriculum or canon of the best. The teachers must know several scores of selections, both words and music, by heart, and be able to teach them by rote. Folk songs and ballads lead, and next come simple but often exquisite selections or simplifications from the great composers. Every academic student preparing to teach in Germany must not only know a large repertory of such songs, but must play the violin or piano, the former usually preferred, especially for rural schools. Nearly every teacher can and

must sing a little, and most of the music in the folk schools is taught by regular teachers, and not by specialists. To fit young men and especially young women for such work is the chief function of this academic department. Everything technical is subordinated to the spirit, and so music is felt. Here, on the other hand, colleges train prospective teachers, if at all, chiefly in technic and note reading, with only the slightest regard to the quality of the music or the subject of the song, while the publishers sell annually tons of juvenile music books chiefly devoted to method, to analysis of processes that never ought to be analyzed, at least for novices, inane exercises, cheap songs, many of them manufactured by the authors of the text or selected almost at random with little regard to educational values, but often for purely methodic reasons. Just as bad English teaching almost invites slang, so unpedagogic musical instruction invites the cheap kind of music which is often a positive obsession that haunts adolescents in high school and college, and leads to the kind of musical emporium I discredited above, for musical jingles that cannot be banished from the mind, but cling like burrs, are products of bad musical education. The college training of future teachers here needs two things: first, far more special attention and time; and, second, a radical reconstruction of both its matter and methods.

(c) Another function of collegiate instruction in music is to cultivate in those who will never become performers good taste and the power to appreciate and understand music. This is often a specified function, and is one of the purposes of college concerts, recitals, festivals, and of some of the courses, especially those in the history of music and the biographies of musicians. As a branch of all truly liberal culture, music can now claim a high and ever higher place. Modern psychology and æsthetics can hardly lay too great stress upon the educational value of familiarity with the great works of the best masters for young men and maidens. The coming theory is in outline, that good music faintly awakens the echoes of the ancestral experience of the race and causes the psychic traces and rudiments of what our remote forebears did, suffered, feared, loved, and fought for to reverberate again in our souls. The great composer wakens these dying echoes, and causes

the soul to crepitate with prehistoric reminiscences that can never surge up into the full light of consciousness. As the murmur of the ocean shell held to the ear, poets tell us, relates the secrets of the deep, so music puts us *en rapport* with the lives of the great cloud of witnesses who constitute our ancestors back and down we know not how far, perhaps to the earliest forms of mammalian or even vertebrate life, or even lower. We remember the phases of the past estate of the race from which we sprang, and rehearse, if ever so faintly, its joys, sorrows, victories, defeats, longings, exultations, and depressions. The soul becomes a resonance chamber for any and every, however slightly revivable, reminiscence, not of a preëxistent state in Plato's sense, but of the experience we inherited from the long line of our predecessors who have bequeathed to us each the quintessential residue of their life history which music puts into our possession. Thus, by a sympathetic appreciation of music, the soul revisits the dim racial past, communes with the countless generations gone before, participates again in their fate, pastimes, and fortunes, so that in a sense they awaken and rehearse their story in our souls.

But music is not only recessional, but processional. It is inspired with the ennobling push up toward the superman that is to be. We expand the narrow limits of our own individuality toward the dimensions of the race and the past and the future. This interpretation of musical feeling is not sentiment, but scientific evolution in this field, or, more specifically, genetic psychology. The golden age of musical appreciation is the decade of adolescence, say from fourteen to twenty-four, when the soul needs and responds quickest to all the vastating influence which is great and beneficent beyond anything in literature or any other art.

Thus I urge that the greatest of all the functions of college music is to acquaint not only special but general students with a wide range of the best music, to insure not only acquaintance with, but infection by, the great masterpieces of all lands and ages. In many colleges, students can hear but pitifully little good music, and in all I believe that the function of listening and the detailed acquaintance that can come only by repetition should be a much greater function than it now is. The Æolian, the Cecilian, and Pianola should not be despised, and should

be vastly more utilized in every school of music. These mechanical players are admirably adapted for the analysis of musical structures, for the study of style, movements, composition, and the vast and rapidly growing body of music now playable from paper rolls is a godsend to everyone interested in music, whether lay or professional. These enable the student to widen the horizon of his knowledge, cultivate taste, discrimination, intelligence, and thus enhance his appreciation of the performance of great artists, orchestras, and choruses.

(d) Again, I plead for a richer and better course in the history of music from its beginning on to the present. It is a wonderful and magnificent story, beginning with the crude, incessantly repeated, rhythmic phrase on to homophonic melody, moving about independently of the key tone like the old tragic chorus, the intonations of the church, and the Italian declamatory recitative. The polyphony of the tenth and subsequent centuries wove independent melodies together, assigning little value to harmony as such. The evolution of the major scale from the old Ionic and of the minor out of the other five antique scales, the development of the progress from madrigal to opera, in tragic chorus to oratorio, the evolution of pure instrumentation, are all fascinating chapters. In such a historic course, which should be thorough and prolonged, all should center about actual music, and the standard productions of the great masters should be incessantly repeated and the story of their lives known. Such illustrations are now practical in these days of mechanical players. This historical course should not only be broad and thorough, but the point of departure for every other department. Growth responds to growth and genius provokes response and appeals profoundly to the faculties of youth, for progress is inspiration to the young. Every great composer of the past should have his week or month of daily work, and every great era its full term of exclusive study, and everything should be practical, with a rich historic perspective. Thus something or some one will make a special appeal to every student, even those who cannot appreciate the latest and most evolved styles and writers.

The first accessory to musical education should be mythology, especially the great mythopoeic themes and cycles that have made so many of the great dramas and epics of the

world's literature, and which constitute the grand ethnic Bibles of races. The traditional material which has vitality enough to survive for centuries and millennia by oral transmission and without the aid of print—this should be the constant study of every candidate for a musical career or degree. Wagner has only suggested to the world the possibilities of musical inspiration that lie in this field. He revealed and revived the Germany of pre-Christian centuries, the legends of the youth of the world, the heroes that loom up from the dim past, the great men of earth, its prophets—the story of the Golden Fleece, of Orestes, Agamemnon, Prometheus, Iphigenia, Electra, Ajax, Æneas and Dido, Siegfried, Brunhilde, Parsifal, Arthur, Beowulf, illusions that center about a Golden Age, about national redeemers—material that historians reject, but that folkloreists and students of the origins of literature reveal. These are what the musician ought to know who wants to be a prophet and apostle of the folk soul and make its creations live again. He should know and feel the most characteristic and dramatic situations, and find in these the source of his inspiration, setting the grandest editions of the race to music before attempting its purer forms. Thus, when it comes to composition, the novice should not forget that the individual repeats the history of the race, and first essay some simple melodies to sweeten and enforce old moving folk poems, for these ancient mythic themes speak to the heart of love, piety, heroism, and it is in the interpretation of these that creativeness is most favored. Let the young composer, then, first essay songs richly set in gesture, posture, pantomime and declamatory action, for out of this music arose, for tone and tune once only reinforced words and meanings. Thus, I urge that infection with much of this legendary myth material should always be prescribed, and that the department of literature represented by the old epic, and the great stories of ancient and modern drama should be the first outside course insisted upon for the young musician, long before acoustics of tone, and even before the French, Italian, and German languages, which, of course, every graduate of a musical course should know.

(e) One very pertinent point is the effect of music upon the nervous poise and control of those who love it. The very neurons may be musically famished or overfed, may be tense

and overwrought with incessant occupation with tedious and familiar elements, or thrilled and exhilarated by great compositions, old or new. Between all these extremes there lies always a normal optimum which every musician should find and live as near to as possible, equidistant from every kind of excess or defect. Music that calms should thus offset that which excites; that which rests should relieve us from that which fatigues. Nearly all musicians have here a unique problem with their own nervous system which only they can solve, but which must be solved as seriously as one seeks salvation. When we meet broken-down musicians in nerve hospitals and asylums, this problem has passed beyond their own power to solve alone, but there was a time when nearly all could probably have saved themselves by proper insight and regimen. I am convinced that it is not music itself, but the fact that the kind of music most habitual is a misfit which is chiefly responsible for the neurotic and neurasthenic states into which musicians, especially lady teachers of it, sometimes fall, and that music has a great, as yet unexploited, power to heal its own wounds.¹ In proof of this there are clinical

¹ Dr. Ireland (Dr. William W. Ireland. On Affections of the Musical Faculty in Cerebral Diseases. In *Journal of Mental Science*, July, 1894, vol. 40, pp. 354-367) long ago concluded that the brain seat of musical feeling must not be limited to that involved in sensory or motor aphasia but that it must be located at least in both hemispheres and could be extinguished only by lesions on both sides. He finds that the musical faculty may survive after very extensive disturbances of the cortex.

Legge (Richard Legge, M.D. Music and the Musical Faculty in Insanity. In *Journal of Mental Science*, July, 1894, vol. 40, pp. 368-375) finds that in acute mania there is great incoherence of musical as of other thought. In chronic mania musical performance is without expression and everything is played not as the music requires, but as the feelings of the moment prompt. Melancholics are not pleased at music. In general paralysis there is great exaggeration of musical as of other powers. In dementia the æsthetic feelings decay early and perhaps first. In partial manias the musical faculty may be unimpaired. Only in general paralysis is the musical ear affected.

J. C. Hadden (Music as a Medicine. Music, 1895-96, vol. 9, p. 359) reviews the studies of the therapeutic value of music and finds them rather confusing. Some think the action is chiefly on the heart, others on the respiration; one thinks the activity of the skin is affected, and others have thought it had wondrous charm in causing fatigue to vanish. Dr. Warthain, of Vienna, hypnotized patients and dosed them with music. In their normal state they were unaffected, but by suggestion all the vital functions became greatly modified. The ameliorative power of music was well understood in classical antiquity and indeed it has always been used to soothe

records that could be cited. Of course we have yet much to learn of the sanitizing and unsanitizing effects of music, but the fact already stands out that the highly unstable age of youth is most of all sympathetic to both these influences. Again, even purely instrumental music not only has hygienic, but moral quality and influence, and this, although not definable, is easily detectible. It stimulates the highest as well as

the sickly. And down through the middle ages various physicians developed cures and ascribed magic powers to it. It is particularly effective in driving away the devil. Perhaps it may have diagnostic value. There are some who ascribe their cure from insanity to it. It may have a medical future. P. Pastnor (*Music as Medicine*. *Music*, 1898-99, vol. 15, p. 650) tells of the great efficacy of singing in hospitals and pleads that this influence be more generally recognized. Of course much depends upon the temperament of the patient, but the question why more is not done to bring out the therapeutic effect of music is hard to answer. E. A. Smith (*The Influence of Music upon Life and Health*. *Music*, 1895, vol. 8, p. 361) gives concrete cases to illustrate the same theme. Very interesting are the experiments of Patrici (*Music and the Cerebral Circulation of Man*), who found a patient whose brain was so exposed that he could test the influence of different kinds of music upon his cerebral circulation. The depressing or exalting character of music upon this boy did not correspond to the abatement or elevation of the plethysmograph curve. All music calls blood to the brain. H. W. Stratton (*The Keynote in Therapeutics*. *Arena*, 1901, vol. 25, p. 287) thinks that certain kinds of music are positively nutritive, and that for those who have musical capacity its curative value is far greater than is now suspected. But there must be careful adjustment. Allegro is not suitable to high-strung nerves, nor is adagio to lethargy. Always we should closely adhere to the keynote for this dominating center, this great factor in convalescence. There is such a thing as a total cure. The major triad brightens, promotes cheerfulness, while the minor triad depresses and should be used but very little, and its harmonies should be kept within the jurisdiction of the keynote.

Naecke (*Les Distractions, Visites, Théâtre, Excursions, Musique, etc., Dans le Traitement des Aliénés*. *Revue in Revue de Psychiatrie*, 1897, pp. 259-269) makes an earnest plea for diversion for the insane as well as nonrestraint, which he deems the chief factor in moral reeducation. Patients must not be treated as children but as adults, with responsibility, dignity and, indeed, with great tact. Very often a diversion of their energy and attention as long continued is the most curative possible method.

E. Lamprecht (*Die Taubstummen und die Musik*. *In Zeitschrift für pädagogische Psychologie, Pathologie und Hygiene*, Sept., 1908, vol. 10, pp. 84-91) advocates the exposure of deaf-mutes, especially those who are only partially deaf, to music, even when the response is chiefly in the form of sensations of vibrations in stomach, hips, feet, or sensation of cold in the forehead or other of the many sensory reactions noticed in the deaf. The reflex tonicities music causes are of pedagogic value. Sometimes the deaf take peculiar and very likely affected pleasure in coming into contact with music. Certainly rhythm can be greatly helped thereby.

the lowest powers. It may evoke morbid languishing patheticism that chills the joy and zest of life to insipidity, or it may make the world seem more real and life more earnest, and endow every experience with enhanced worth. The moods which it commands constitute, after all, its deepest and most lasting value or harm, and especially to the plastic and susceptible stage of student life. Only those who have systematically collected confidential youthful confessions of how music brightens and exhilarates or depresses and dismays life can realize its usually but little suspected potency over the soul in its struggles up to full maturity, and it is chiefly this I would have preferred to spend my time in trying to bring home to the better knowledge of college professors of music, who have doubtless all felt, but probably forgotten, as we are all so wont to do, most of those very deep but essentially transient and lapsible experiences of the seething age of the later teens and early twenties.

(f) Finally, music gives us confidence in, and respect for, human nature. One reason why we enjoy a great work of musical art is that we realize that it was produced more or less spontaneously out of the depths of the soul of a genius, and hence we feel that his soul is sound to the core, and, since the power to appreciate is a small degree of precisely the same kind of psychic energy that creates, we feel that we, too, are sane and healthful in the depths of our being. Helmholtz is right that the art connoisseur abhors chiefly the signs of conscious and deliberate purpose to produce this or that result by this or that means, and wants instead purely instinctive irresistible spontaneity. The composer must sing as the bird sings, because he cannot help it. Music is thus a message to the ordinary and more superficial conscious and self-conscious life from the profounder regions of the unconscious and instinctive substrata of the human nature which constitutes nine tenths of life—a message which says “all down here is beautiful, harmonious, and there is overflowing superfluity of vitality.” This is the voice of the race saying to the individual, “You may be sore bestead, weak, vacillating, ignorant, in doubt; but, if your bark sinks, it is to a larger sea, and there are everlasting arms beneath in your own soul.” It is the heart out of which are the issues of life, irrigating, refreshing, inform-

ing, reinforcing the dusty, moiling intellect. Hence, it follows that there may be too much and too incessant analysis, criticism, and self-consciousness in our academic curricula. We can no more create musical genius here than in other fields. All greatness is more born than made, but more easily than in other fields we can destroy the buds of genius by superfoetation of precept, mere erudition and theory. Musical appreciation evokes musical creativeness, and it is music itself, much of it and often, that inspires, and not the discussion and technic that teachers tend to lapse toward almost in direct proportion to their inability to create or even to execute. As in all other branches, here there are teachers of music who are musically sterile and exhausted, and is it not they who are more often the methodasters prone to magnify pet devices? It is at any rate when theory is predominant that music tends to become manufactured and made by rule, perhaps correct, but contentless and dead, with no message or gospel from the oversoul to us.

Thus, in a day when psychologists are realizing with one accord that the feelings are far vaster than the intellect and will, and are more important for health and sanity, it is clear that music teachers more than any other class are charged with the custody and responsibility of the hygiene of the emotional life. Do they sufficiently realize that music may enfeeble, corrupt, seduce, degrade, let loose the worst things in the soul—that it may bring neurasthenia, loss of control, neurotic instability, pollute the very springs of life, as well as degrade taste to tawdriness and puerility, while, on the other hand, good music may almost create virtue and tune the heart to all that is good, beautiful, and true, bring poise, courage, enthusiasm, joy of life, tone up weakness and cadence the soul to religion and morals? Just as there is a literature so bad that one had far better go through life illiterate than to read, so there is music so corrupting and neurotic that the densest ignorance of this great art is better than knowledge and acquaintance with it. This moral and hygienic quality of music is the theme on which I would like to dwell, but I will only say in closing that it is a fact now, as it was in the days of Plato, who would banish the Lydian and Ionian musicians, retaining only the Doric and Phrygian, that precisely this dis-

inction between moral and immoral music is perceived just in proportion as an age is endowed with true musical gifts. Lack of these ethical and educative characteristics is our predominant national musical weakness, for the chief of all problems in this field is the effect of music upon the morals and the nerves.¹

¹ See Farnsworth, Charles Hubert, *Education through Music*. New York, American Book Co., 1909, 208 p.

CHAPTER IV

THE RELIGIOUS TRAINING OF CHILDREN AND THE SUNDAY-SCHOOL

The ideal in religious education—Place of the mother—The concept of religion we need to start from—*Critique* of ethical culture—The religion of the cultivated adult intellect no guide in teaching children—National loss of contact with childhood—Defects of Sunday-school and Bible pedagogy—The Old Testament should first predominate over the New—The latter is chiefly for adolescence—Jesus' humanity should be taught before his divinity—Stories should predominate—Grotesque absurdity of certain Sunday-school methods illustrated—Use of non-Biblical sources—Pedagogic need and place of the higher criticism and also of the miraculous elements—Needs of educated young men and women not met—Harnack's proposition—The Sunday-school in England—New steps the church should take to recover its lost influence.

A COMPLETE religious education on the recapitulatory theory would be to give each child a touch of the best in every religion through which the race has passed from the lowest to the highest. Most great classes of natural objects and phenomena have been worshiped somewhere, some time, by some race; and, if all the potentialities which the race has ever shown exist in germ in every normal child, why should we not, if we follow an ideal system, put him through a course beginning with fetishism and ending with pantheism, if those philosophies of religion are right which make these the alpha and omega respectively of religious evolution? Thus, from reverencing charms, mascots, and hoodoos, the child would pass in some order yet to be determined through the worship of rocks and stones, sun, moon, stars, clouds, storm, wind, thunder, fire, sea, streams, trees, flowers, animals, diseases, heroes, ancestors, virtues, and mythic personifications of all these, on to that of the great cosmos itself. In fact, the rudiments and buds of every one of all the ancient religions are

found in the child's soul; and they are developed to some extent, not as full-blown cults or religious finalities, but by sympathy, poetry, nature study, etc., for these live, move, and have their being in the faculties that the child inherits from his remote forebears, to some of whom, in his long line of descent, each and every part and aspect of nature was probably once a supreme object of worship. Culture interest in these things is thus the creation of the old religions, and our æsthetic love of nature had its phyletic origins in superstitions which connected these with human weal or woe. Hence, folklore and myth in children are like the husk or shell that protects the growing kernels from which the very bread of life, science, literature, art, religion, are made, and that falls off only when the grain is ripe.

How completely each of these stages can, or should, be caused to develop in each child is primarily a question of the amplitude of its psychic endowment and the vigor of its growth impulse. A transcendent genius who could grow mentally until fourscore years of age might perhaps recapitulate all with more or less fullness in the course of his own life. Goethe gives us some glimpse of what such a man might be and do. Max Müller has told us that in India the children are often crass idolators, busy with amulets and charms; the parents, neglecting this, worship the great gods that personify elements—Brahman, Vishnu, Siva, and the rest—while the grandfather has passed beyond the adoration of all objects or personalities, and found rest for his soul in the infinite and eternal one and all. A child might conceivably be trained in all the beliefs, rites, and customs, e. g., of Catholicism, and at first accept all as literal. If endowed with religious genius, he would later surely come to regard all he had learned as symbols, tropes, and figures of an all-embracing religion of humanity. He would learn that no creed or form says what it means, but is only a type of the forever unexpressed. Such a seer might in very deed be a devotee of every faith, a true initiate into every cult, the real worshiper of every totemic emblem, of Ahriman, Osiris, Orpheus, Jove, Jehovah, and the rest; he might be a Confucian, Buddhist, Mohammedan, Christian, all in due proportion; and, if he could not worship every deity at every shrine, would at least know that it was because

he had unused powers or was incompletely developed. If a safe, working majority of his faculties worship the truest, highest, and best in the right way, it would suffice. He might adore each in turn with abandon according to the formulæ of henotheism, making each supreme in succession.

Such would be the religion of the ideal sage or superman who, however, alas! has not yet existed. Life is too short and our souls too small, so that most men can have but one or, at most, a few altars; and devotion to one or to a small group means the dethronement if not the diabolization of the others. With a new love, the old too often turns to hate, and a new affection becomes expulsive of the old. Religion always tends to violate the principle of the Aristotelian temperance. Its pristine affirmations are so emphatic that they have to find expression in negations and denials. Thus, one stage discredits those that went before, and we may be most intolerant of those creeds which we have but just discarded. Intolerance and even persecution and religious wars may arise as well as narrow orthodoxies, which are sad expressions of the limitations of man's religious nature. Thus, religion is defective whenever we forget that the same All-father has been worshiped, though imperfectly, by every sincere member of every pagan faith. Religious pedagogy must accept these limitations and make the best of them. Although recognizing that there is good in all, it must select and curricularize the best and neglect the rest, content to do what it can with the remnant of religious possibilities left in the soul, with the fragment of time and the modicum of teaching ability available. It should, however, preserve this larger, wider ken as an inspiring overthought.

For the infant, the mother, if not God Himself, is in His place, and there can be no better religion than this natural sense of love and dependence which is felt and developed toward the mother, turned later in life toward the heavenly parent. Later, the truest religion that lives in the child's soul is feeling for the aspects and objects of nature: dawn, twilight, hills, mountains, lakes, rivers, heavenly bodies, clouds, rain, sun, dew, flame, heat, wind, trees, animals. Exposure and attunement to these, not by conscious and explicit exhortation but by way of implication and suggestion, impel the

child onward and upward by the same way the race has ascended from nature to nature's God. More or less superstition and animism are inevitable, and are also indispensable. These are the matrix in which awe, reverence, and a sense of atonement or at-one-ment grow. The child who has adored and has sent wishes toward the moon will worship the unseen Lord of heaven and earth better later for having done so. To have mused in the forest and by the sea makes it easier to draw near to God. Solitude with nature invites the heavenly powers. The city child, who lacks all this first-hand communion, develops without something very basal in the edifice of its religious life. A religion of purely human service without this element, noble though it is, has in it at the very best a note of precocity.

In seeking to solve the problem of religious education, we must now indicate our conception of religion. It is, in a word, that God is the cosmic order personified, and religion is loyalty to it, or mythopœically to Him. The divine is more than the power that makes for righteousness, for this limits it to the human world. It is also the power that makes for order, law, and the possibility of science. God is larger than humanity, Comte's *grand être*. We must love and serve the Universe, to use the phrase of the Stoics, as well as man. Where there seems conflict between the cosmic and the moral order in the sense of Huxley, it is because our religious instinct falls short of attaining its goal, which is to unify these into a larger whole. To a true psychology of religion, no such discord is conceivable. When I gaze up into the sky and say with a full heart, "Our Father who art in heaven," I attain thereby one of the chief summits of purely religious experience, for, psychologically interpreted, this means that I recognize my filial relation to the great one and all, from which my own being was derived through the long processes of evolution. I am a child by direct lineal descent from the solar system, to the soul of which James and Fechner say we ought to limit our devotion. But this smalling down of the world by pragmatism limits our religion, which should enable us to expatiate to a larger and more transcendent perspective. I am a son of the sky and the nebulae; thence I came, and into them I shall be resolved. To contemplate them is navel gazing and

saying "Om." All other origins and destinies are proximate. Science also relates me phyletically with aquatic ancestors, and my body and soul bear many rudiments of their pedigree through a long train of prehuman forebears; but my ultimate source is the ether or whatever was the primordial basis out of which the world arose. Genetic psychology is even bold enough to propose the hypothesis, till some better is found, that the reason we love the unpractical or useless study of astronomy is because it is an unconscious orientation of the soul toward both its pristine and also its ultimate home. Thus, we respond in the unfathomable depths of our being to the processes which drew us from the void, and will return us to it again. Only this conception makes us realize that we are relatives not only of animal and plant life, but of rocks, soil, sea, air, brothers of every element; that all are our kin, for we have the same parent. Thus, evolution, even in its haziest chapters, comes home to the heart as a revival of true religion, and reveals and strengthens its ancient foundations in the soul. That is why we are prone to accept the development theory by faith where it remains still unproven. Poets of nature have always felt this. Moreover, there is ample space in every roomy soul for this dim but potent pantheistic sentiment, and for any and every special faith and creed beside it. Indeed, this fructifies and reinforces any or all of them. The fetishist and the Christian are both better for bathing in this cosmic ocean, which gives to everything good in them a wider horizon, a more vital interest, and an augmented motivation. In experiencing it we commune not only with the soul of the race, past and present, but transcend the limitations of humanity, and realize that we are parts of all that ever was, is, or will be. The very reveries of childhood which, like so many of the deliverances of consciousness, rarely say what they mean are really far nearer to this than we dream. Happy the wise and most venerable sage whose most evolved consciousness has truly thought and seen all that the child dimly feels of this all-encompassing oneness which makes the world a true universe of all that is animate and inanimate alike.

It is this basal sanitizing sense of being truly at home in the cosmos on which all religions rest, which the ethical culturist, in his zeal to follow Kant in evicting theological motives

to virtue, fails to do justice to or to utilize as he should for conduct. He focuses his first and chief attention upon the nearest social duties to our fellow men, and finds pragmatic sanction for all these cardinal obligations. This is well, for most such motivations can be justified to all whose intellect is vigorous and cultured enough to understand the need of morality for the ordinary conduct of life. But the æsthetic response to nature, as he sees and phrases it, is a faded thing compared with the religious response. His cult especially fails to meet the nature and needs of childhood and youth which must personify and use the tropes of myth when the soul really and vitally acts. The young must feel that there is a veritable Father in Heaven with human attributes, must love and pray to Him as a divine parent, just as a plant must blossom and scatter its petals in order to bear fruit, or as the infant must feel love and dependence toward the mother, as above described, who for the time stands in the place of God, because toward her are directed and by her developed all of those sentiments which, when transferred to a divine person, constitute religion. Thus, the best forms of faith always change, though its essence persists and increases. All this is really only religious embryology, which is now taking its place beside the old and highly articulated morphology of piety, to which we have hitherto been too exclusively devoted. As the dominant interest of the child is in the world of persons, it naturally tends to personify all parts of and all things in the inanimate world, as a means of extending its zest into this wider field; and, if this is forbidden in its nascent period, not only the child's religious nature but even its potential interest in art and science is dwarfed. Primitive religion largely consists in interpreting and adjusting to phenomena of inanimate nature, animistically conceived. Thus it comes that premature depersonalization is like peeling off the bracts before a bud is ready to blossom. Again, instead of the Hebrew being the first religion to make for morality, as we are sometimes told, every primitive cult prescribed rites and forms of worship as ideal conduct with reference to what was thought to be supernal powers and with reference to some end. Ceremonious observances align us with the divine wish or will, placate its anger, or win its favor. Mistaken though many religiously

motivated acts are, the association of faith and conduct is nevertheless inveterate, and the instinct to connect them is so strong that it is wasteful to rupture them in the young. Thus, as the roots of all religion are found in natural phenomena, interest in these must be stressed with the child. He should live close to Nature, for he felt her in a heart-to-heart way long before human society, save in its crudest and most animal relations, was much developed. Nature, religiously interpreted, taught him many cardinal moral relations at a stage when the chief content of his soul was instinct, sentiment, and intuition, and long before the dawn of anything that could be called reason. This is the time of the Old Testament before the New was related to it somewhat as theologians related the Old to the New as being concealed in it and coming in fullness of time to reveal it—this is a genetic statement of what the old forms of nature worship meant, and this will always be the *Vorschule* for religious pedagogy.

The negative attitude of ethical-culture movements toward the religious motivation of morality is part cause and part effect of a lack of interest on the part of its representatives in the recent development of religious psychology and of their devotion to Kant, whose once epoch-making work in this field has now little more than historic interest. Like Froebelism, Herbartianism, and the few remaining sociological disciples of Comte's *Politique Positive*, they fail to recognize the fact that more detailed studies in this field have far transcended these ex-masters, so that adjustment and progress all along the line have become imperative. The spread of the culturist movement again has been greatly favored by the laicization of education in France, the separation of church and state in this country, and the secularization tendencies everywhere. Moral teachers have had to do the best they could under limitations, for these changes have made a field and need which the ethicists deserve the greatest praise for making the most of. Their great mistake, however, has lain in denying that religion, in domains where it can be utilized, is a most potent aid to virtue, and also in failing to keep abreast of the scientific studies of childhood and youth, which have shown how much more than was suspected the souls of juvenile candidates for mature humanity are made up, warp and woof, of what is

really religion, although outside the narrow ecclesiastical definitions of it which they have practically accepted from the church. It is this newly realized wealth and worth which should be cultivated by every, no matter how secularized, curriculum. As theologically conceived religion constitutes a perhaps dispensable element in ethical training; but in the vastly broader new psychological and genetic conception of what it is, and means, nothing is so basal, and the neglect of nothing so irremediable. Thus, ethical culture as organized in the societies of this name, enthusiastically as it must be commended for nearly all its positive achievements and endeavors, in its negative phases is reactionary and one-sided because it persists, against the better insight now attainable, in separating faith and conduct which God and nature have indissolubly joined.

Before stating what we deem the fundamental principles of ethnic religious education, it is necessary to distinguish clearly between the pedagogic and the scientific point of view. The religion of the adult cultivated male intellect may be roughly characterized somewhat as follows:

(a) The highest personifications within its ken are the best men and women now living. To personify the divine, means to impose human limitations upon it, and we must from this point of view no longer regard either objects, groups of phenomena, or the cosmos itself animistically. All gods are projections of the individual or the racial soul, or of both. Theology is transcendental anthropology. To reason and science, the world and the powers that rule it are dwarfed and distorted if cast in any personal mold. To be sure, the heart and the imagination, whenever deeply stirred, respond instinctively by the affirmation of personality, just as the optic nerve, however excited, whether chemically, thermally, haptically, or photocally, responds according to the law of specific energy, only by the sensation of light. This is the reaction of the deeper, older strata of our nature. Men may conceive their own tribe or race as a suffering and triumphing person like the Messiah of the Hebrew prophets. We may also more comprehensively apprehend humanity itself as a collective personality, of which all individuals are organs, cells, or fibers in it; or we may postulate a still more poetic soul of the cosmos

itself. But these are ideals. The only real persons are people, to serve whom is the only true service to God. Hence, all divine authority is really inward, and by rising to this purview alone can the sage become free from all the repressions due to external constraints or impulsions. The most imperative voice in the world is the inner oracle of conscience. We approach the Divine by self-communion and intuition. There are no sacrifices save those of the baser elements of our own nature, and no objects of worship save the best that is in man. There is no litany or ritual save good thoughts, feelings, deeds, and good will. Thus, we reach the insight that the only true religious growth is inwardization. The powers that make for good and evil are not angels or demons, but are in us. Revelation is the opening of still more interior chambers in our own souls, and we are inspired when the best latent elements there become patent. When we listen to and obey these inner admonitions, we are true children of the Divine. This resolution of the objectivities of religion into subjectivities brings with it a profound sense of self-pity that we have thought so meanly of our nature and its possibility when, in fact, we cannot begin to think half highly enough of it. Thus, we internalize all the effects of the soul by a blind but sound pragmatic or pedagogic instinct. Objectivity is, of course, easiest to grasp, and more effective for conduct with the masses than this subjectivization.

(b) We have no convincing proof that can for a moment satisfy the canons of logic of the existence of revenient spirits, or even of the post-mortem perdurance of personality. Our supreme mundane duty is to develop our own physical and psychic personality to its uttermost, or, in a word, to make the very most and best of ourselves in this life, and to find sufficient earthly motives for virtue and against sin within ourselves and our environment. A morality that needs rewards and punishments in another life is immature, artificial, and false. To be influenced by the fear of pain or the lust for pleasure in an eternal beyond is at bottom only selfishness and Hedonism in a vaster field. All true rewards and penalties are inward, and to the fully evolved soul these are adequate. No real evil can befall a good man, living or dead, if he is true and loyal to himself. If there be a future life beyond the

range of all our arguments, the best preparation for it is to forget it here and now, and to live out our present life day by day as completely and purely as possible.

(c) All mediatorial functions are for undeveloped souls. If a bad man becomes good it is by no external ceremonial. Churches are infirmaries and sacraments are orthopedic devices for the crippled and deformed, and priests are physicians for the sickly or teachers for the spiritually immature. Commerce of the soul with the Divine is direct and immediate. Ecclesiastical functions are valuable only so far as they introduce men to powers within themselves that were undeveloped; they are psychotherapeutic methods, the end of which is to stimulate inadequate powers.

It is religion, rather than the external world, as epistemologists have so long urged, that chiefly needs to be inwardized. Philosophic idealism expressed a profound instinct, but mis-carried because it mistook its field and object. Just in proportion, thus, as religion strikes in and takes the form of interior realization and edification, do all its externals, having accomplished their end, become deciduous or desiccate to barren formulæ. They have worth just so far as they stimulate this inner growth, which is their substance, while all else is shadow. Dogma is to evoke intuition, which then supersedes it. Penance and oblations are symbols of sloughing off our baser selves. Prayers are paradigms of aspiration for a higher life and for unity with the great all. Confession is a form of extradition of evil. The Eucharist is a type of reconsecration to the service of suffering and exalted humanity. Redeemers are great moral and religious geniuses who help feebler folk to realize the higher potentialities of the kingdom of man's soul. Regeneration is an exceptionally rapid transition from the crass and animal basis of human life up toward the ideal of the spiritual man. Revelation is inner truth that is first presented objectively to be appropriated and absorbed. It is something like this that has always been the religion of the great souls who live among the altitudes of thought, and it is also the religion of the future, although only for the few, though let us hope steadily increasing number, of such souls.

This rudely sketches the religion of the intellect solicitous only for truth as science defines it. It is not for leaders, but

for those who have reached the last stage of religious evolution and are ideally senescent, having attained the final stage of the Protestant revolt. In contrast with this the life of the heart is inconceivably older and nearer to the Silurian ages. It can never live without its æsthetics of worship. It is because genetic psychology now shows that, imperatively as sanity and plasticity require us to live palpitatingly in and close to the present, to occupy ourselves chiefly with its duties, as the Neo-Christians exhort us to do, it also recognizes as the world has not seen before that wherever the emotions are involved we still live in and through the past, and that the roots of our being strike down toward the beginnings of life. Recognizing thus fully the claims of a religion of pure reason, we can now realize more fully than ever before that man has fundamental pragmatic or pedagogic needs that this can never meet. The two points of view differ *toto calo*, and so do their methods, but not only are they not inconsistent, but each is indispensable to the other. Nothing is so historic as the soul in the sense that in each of us it lives and ranges through all ages, and the error of logic is in its superficial concept of consistency and its failure to see that, while the domain of science and reason must be everywhere advanced, the mind must not in doing this lose temporal perspective.

Now it is in the advocacy of the above most advanced concepts of religion fit for the mature or post-mature intellect, but not for the young, that we have only another illustration of the many to be cited in this volume of the decadence of the pedagogic spirit in this country which is without parallel in history. From the old New England catechism to President Eliot's latest pronouncements reducing religion to ethical culture, American educators have to an extraordinary degree ignored the nature and the higher needs of the child, and persistently assumed that whatever was good for them was, of course, good for him. No wonder such leaders think meanly of pedagogy and paidology as academic topics, or that teachers, so quick to catch the *animus* of the college and the university, still hold these topics in light esteem. Hence, it is at this point that we must briefly glance at some of the modern causes and consequences of this national loss of right contact with childhood.

This has many sad illustrations. There are now some two million childless homes in this country. Houses and flats are built with no nurseries or other provisions for children, and landlords often discriminate against them. A large and growing proportion of mothers cannot or will not nurse their offspring, and without the performance of this function motherhood is always incomplete. In Greater New York alone the Gerry Society reports some fifteen thousand children that are annually brought to their attention because of parental cruelty or neglect. Statistics show that for the large and growing percentage of divorces the existence of children is less often a bar than in other lands. The young here are earlier emancipated from parental control and more often feralized in gangs, and hoodlumism is more common. Precocity in those respects which can be estimated is more common. Parents, especially of only children, are overindulgent, oversolicitous, and often bring their darlings up according to fads and whims which sadly interfere with nature. Teachers report that parents of foreign birth show much more interest in the school and more pride in having their children do well than do native-born parents. Again, the cultured classes marry late or not at all, and have few children. American fathers of the middle and upper classes leave the children, even the boys in the teens, to the mothers' care, and, as school teachers are mostly women, feminine influence predominates at an age when boys most need fatherly and male control. Child-labor laws are still often hard on children, and in some states the age of consent, despite great reforms, in this respect remains deplorably low. Once more, we are immeasurably behind many other lands in the matter of good toys for children, and really know little of the vast variety and the highly educative influence these can exert over them. In the matter of pictures adapted to childhood, especially wall pictures helpful in school work, we are undeveloped. A goodly fraction of our population are born and reared, at least in part, abroad, and come to our shores already beyond the age when they contribute to the volume of child life. Tributary to this same sad loss of instinctive and sympathetic appreciation of childhood and its naïveté is the fact that we are a new country, and our history does not go back to aboriginal stages. Such historic contact as our children get

with primitive life is by the study of the Indian, who is essentially of the stone age, and between whom and us there is a great chasm of development, to say nothing of mutual enmity, so that this contributes its moiety to weaken our genetic sense. Our schools are very advanced in all that pertains to the regimentation of children, to setting and hearing lessons, marking, and all that is material, formal, and mechanical; but the American teacher usually does not and cannot really teach as does the German teacher. Just as the knight-errants in the days of chivalry knew, because he lived with and on him, his horse, which we know only from a driver's seat or through the coachman, so the American parent and teacher once knew the child from close, vital contact, but now each knows only certain aspects of the child's life. Still further, the aging are crowded out and the juveniles forced into positions which they are not ripe for. Life for grown ups is so intensely absorbing that men and women easily and completely forget what it meant even to themselves to be a child, and cannot wait for nature to develop their own offspring. Children stretch and tiptoe up, eager to be men and women, and often become so prematurely, and hence often incompletely, although they save time thereby; for all growth, whether of cereals, men, cities, nations, is interesting here only when it is phenomenally rapid. As the young often affect maturity, so the aged are prone to affect youth, because all want to get quickly to the stage of maximal efficiency and to remain there as long as possible. Our love of children is too often that of the auntie, the grandmother, or the doting bachelor uncle, rather than that of the normal parent. We constrain the child to try to think and reason before it is able to do so, and hence neglect the nascent stage of drill, habituation, and discipline, just as we make him write so early that penmanship is later a crippled thing, and give him fine sedentary work, even in the kindergarten, and so bring symptoms of chorea when the larger muscles should be chiefly trained. Thus, we see that it is only one, if a culminating, error that we make when we try to train the child to skip too many of the stages of recapitulation and become a moral sage like the noble Stoic philosopher, or an ethical pundit, and base conduct upon intelligent and infinitely complex knowledge of society and his manifold relations to it and of human nature

at a stage when religion was meant to be the chief of all moralizing agencies.

Thus, to summarize, the problem of religious education for children can be solved only by looking primarily at their nature and their needs. Religion is for the child rather than the child for religion. Never in history has an age so lost touch with childhood, in home, school, church, as our own, which is doing so much for inculcation and indoctrination with prepared culture. Until the recent child renaissance began, which promises to better all this, it was religion and health that suffered most of all. Some break the infant soul prematurely into the literature, rites, and even the creeds of adults. Others would rob it of its own natural religion by attempting to exorcise it as superstition. All failed to see that the child must be a good pagan, suckled in creeds that adults have outgrown, or else its religious and moral nature will be lamed and sickly through all later life. Philosophical systems from Locke, down, so carefully summarized by Lyon,¹ shed hardly a ray of light here. Worse even than their pedagogic methods is the spirit which most of the Sunday-school experts—Protestant, Jewish, and Catholic in almost equal degree, though in different ways—show, in tearing the embryonic soul from its very placenta of superstitious nature worship, in which it should be left to ripen for due season. It is because we flay instead of awaiting normal moults that the juvenile mind so early becomes sore and raw with consciousness on religious matters, or else with premature inculcations which, according to an iron law, tend to become encystments too tough to be shed, and so work their havoc. He or she who has never been a true child in religious matters will never become a full-grown man or woman. And hence come the common stigmata of infantilism in this function. Just as the Freud school shows that precocious sexuality or especially assaults tend to impair all the psychic functions of marital and parental life, so *questionnaire* returns abound in analogous results due to forcing religious activities before their time. It has often been asked of late whether the child can survive modern civilization which

¹ Lyon, Georges, *Enseignement et Religion; Études Philosophiques*, Alcan, Paris, 1907, 237 p.

at so many points is so hard on it. Many perfervid inculcators are so devoid of sympathy into, and so illiterate on, childhood that if they had their way the sweet, natural religion, which is the psychoplasma out of which true piety of every ilk and name is made, would in a few generations be as nearly eradicated as anything with such vast momentum of heredity behind it can be. So invincible is their sense that what is good *per se* or for them is of course good for the child, so fanatical their instinct of indoctrination, so prone are they to regard religion as an infection or conquest rather than a growth, so ignorant are they of the very existence of paedology, from the standpoint of which a man may hold all the above views and be at the same time a devotee of any creed or sect, that they are still sometimes prone to sling the mud of religious intolerance at a plain, hard-working devotee of the science of the child by dubbing him as some kind of an *ist*, or *arian*, or *ologist*, or to otherwise raise the old "hep" or hue and cry of heretic or sceptic. In this tendency we sometimes see, even in our own day, the attenuated relic of the bigotry and fanaticism that made the old religious persecution. Said an eminent Sunday-school worker, an authority in such matters as roll calls, rewards of merit, picnics, records, departments, chalk talks, and sermonettes, a man gifted in conducting child prayer meetings and revivals: "We care not what the child is by nature. We are interested only in what it can be made by grace. No matter what it is, the one and only great fact that concerns us is that the divine spirit can transmute its nature, and thus save its soul from eternal death. Until gathered into the true fold, all are children of the evil one, and not of God. Thus, we should save rather than study them." Thus, as the noble ideals of chivalry could degenerate to the level of a Don Quixote, so the Holy Ghost itself can have doughty, wooden-souled knights ready to joust against anything natural, and it is a new proof of the vitality of religion and of its power to influence life for the better that, despite all such aberrations, we still believe in this function of it.

. On the other hand, we have happily passed beyond the smug complacency of the days when uniformity was the chief inspiration, and when "eight million American children and adults studying Abraham's sacrifice at the same time" consti-

titled "the most sublime and reassuring fact in the-universe," when "a batch of cheap songs by cheap amateurs were whacked up for each lesson," and prayer was the best preparation a teacher could make. The uniformitarian movement left, however, as its most precious legacy the ideal of a union of at least all Protestant denominations in this work, which is still bearing good fruit, for sectarian differences are not for childhood. Now we find at the other extreme the movement to emulate, and even outdo, the public school in elaborate gradations in departments and classes, one scheme being to have a complete series of lessons for every year between the ages of six and twenty-one. Some even suggest salaried teachers, tuition fees from pupils, written examinations for promotion, records, prizes, diplomas, and professional superintendence; while others demand Sunday-school chairs in theological seminaries that clergymen may be qualified to take a greater and more intelligent interest in the Sunday-school. One eminent leader pleads for the endowment of a national Sunday-school university; another urges that large Sunday-schools have classes for defective and subnormal children. One wishes a special Sunday-school ritual and a system of sponsors, and proposes prizes for the best sermonettes and model prayers for children, and volunteer tutors for those that are backward or retarded as a mode of special coaching. Another would revive the catechism and have printed questions and answers with proof texts to be memorized.

Meanwhile, but a few years have passed since Prof. Herbert B. Adams, after an elaborate summary, told us that "America is probably one of the most backward countries in the Protestant world as regards intelligent historical and literary study of the Bible."¹ The ineffectiveness of our religious training is strikingly brought out by several sets of statistics, showing that a varying but always large majority of the inmates of juvenile reformatories, as of adults in jails and prisons, were once Sunday-school scholars; and also by the presentments of President Thwing.² He found that less

¹ Adams, H. B., *Church and Popular Education*. Johns Hopkins Univ. Studies in Hist. and Pol. Sci., 1900, ser. 18, Nos. 8-9, 84 p.

² Thwing, C. F., *Significant Ignorance about the Bible as Shown Among College Students of Both Sexes*. Century, May, 1900, vol. 38, pp. 123-28.

than half of the plain Biblical allusions in a set of passages from Tennyson were understood, and found reason to believe the same was true of Browning. Indeed, English literature has developed in very close relations with the Bible, which is a key to much of it. Small as the number of students here tested is, the author gives reason for believing that his results are typical for our academic youth, and ascribes this neglect of Scripture to multiplication of other printed matter (seven to ten thousand volumes being published annually in this country, to say nothing of the rising tide of periodical literature and the daily press, and the special Sunday-school publications, which are legion), to the decline of family life and prayers which the Sunday-school has not compensated for, and to the decay of Sabbath observance. Very hopeful of better things, however, is the growing insight among the advanced Sunday-school men and women, that everything here must take its cue from the child. This at least gives the right orientation. The Rev. J. L. Hurlburt says: "The study of the child is in our day the subject to which the greatest teachers and the greatest teachers of teachers are devoting their best energy. No book on teaching is of value that omits or treats carelessly this important department."¹ M. C. Brown² says: "From the child-study point of view the child, like the race, must ordinarily pass through the more elementary stages of spiritual growth." C. L. Drawbridge³ bases his hope of escape from the fact that now "the whole thing (Sunday-school work) is a confused jumble in children's minds," for the new scientific knowledge we are relying on the child. G. H. Archibald⁴ says: "I am not unmindful that genetic psychology, commonly called child study, is yet in its infancy, but enough has been revealed already of the nature of the child, enough that is definite and final, to show to the teacher of religion and morals the need there is for him to change his plan of organization, to reform his methods of teaching,

¹ The Introduction to A. H. McKinney's Bible School Pedagogy. Eaton & Mains, N. Y., 1900, 78 p.

² Sunday-school Movements in America. Revell, N. Y., 1901, 269 p.

³ Religious Education, How to Improve It. Longmans, Lond., 1906, 222 p.

⁴ The Sunday-school of To-morrow. The Sunday-school Union, London, 1909, p. 7 and p. 103 *et seq.*

and enable him to follow the line of least resistance. . . . The children have been subjected to adult requirements, and everything, so far as they are concerned, has had to give way to adult conveniences. But this must be changed. When the members of the church, the adult church, come to see their duty, when, because of failure, they are forced to inquire into the cause of decay and seriously examine the nature and needs of the children, these things will be changed, and church buildings, church schools, etc., will be adapted to the needs of the children and youth.

Says J. S. Kornfeld,¹ "the radical defect in our Bible teaching lies in our total indifference to the power of a child's apperception," and even the Religious Education Association seeks to bring about in the Sunday-school "an adaptation of the material method of instruction to the several stages of the mental, moral, and spiritual growth of the individual." But, alas! Is there any class of people save promoters of new financial projects who so divorce prospectus and theory from facts as teachers? How often do we hear the most alluring pedagogic ideals from educators who violate in their own practice every principle they advocate in public! Perhaps the vacation and convention moods atone for practices that are sometimes vicious or else vent aspirations that are useful only in keeping up courage in work handicapped by difficulties and traditions that would otherwise be intolerable. The whole church will one day be organized on this new basis, and its members in council will look back with wonder and pity upon the dark ages of the nineteenth and twentieth centuries, when the church was buried in formalism and self-complacency, and the children were overlooked and forgotten. We can now profit, if we have no phobia for things "made in Germany," by the remarkable pedagogic organization of religious education for children there.²

The belief in the absolute and literal truthfulness and finality of the Bible often makes of the Book of Books a pedagogic incubus and monstrosity. It is, as Moulton says, the worst-

¹ Bible in the Sunday-school. The Open Court, August, 1909, vol. 23, pp. 476-483.

² See an admirable presentation of this subject for each German State, by Güttler, Wilhelm: Die religiöse Kindererziehung im Deutschen Reiche, 1908, 331 p.

printed book in the world, with sins unnumbered against the hygiene of the eye; but it is also, as Kornfeld urges, the worst taught of all books, and, as I would add, the most grossly misunderstood. To eliminate it from education, as the secular schools do, is as preposterous pedagogically as it would have been in the days of Plato to taboo Homer in the education of the Greek youth. It is not only a model of English, translated just at that period and in just the way that make it one of the best monuments in our language of direct, simple, forcible Saxon style, but it is impossible to understand the culture history of any country of Europe without it, as it has influenced the literature, history, and the life of the Western nations as no other book has begun to do. Now that we have a new historical revelation of it by the higher criticism, this outrageous abuse should cease. The best myth is philosophy pedagogically adapted to the young, and philosophy is only myth written and revealed in terms of the adult intellect. The child feels the full force of Grimm's "Märchen," of the "Niebelungenlied," the "Arthuriad," the "Iliad," and the "Odyssey," without torturing his mind at every step with the priggish and insistent question whether the incidents and heroes are objectively and historically true, as our methods have taught him to do regarding Scripture. Thus, the essential truth is missed, and its unique edification miscarries. Again, every act and word of both Jehovah and Jesus was exactly and exquisitely adapted to the immediate environment and occasion which invoked it. The prophets attempted little prediction, but were occupied chiefly in interpreting the present optimistically even in the hardest of hard times. As a whole, Scripture is a masterpiece of adjustment, of making the best and most of events as they arose. Hence, it follows that there is much that is unfitted to the individual or to the life of to-day, so that expurgation is needed. But this done, the remainder, fitly printed, arranged and understood, should be taught to every child as an inalienable birthright. Even its miraculous records are mostly, as now interpreted, psycho-pedagogic *chefs-d'œuvre* of unique power, into all the higher meanings of which their symbols unfold as the soul ripens to maturity. Thus, there is no such text-book of both the higher anthropology of races and of genetic psychology showing how the indi-

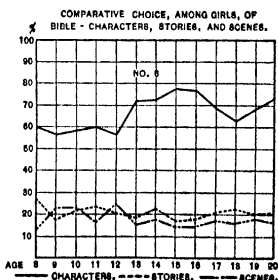
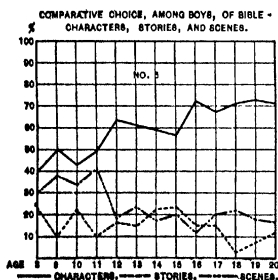
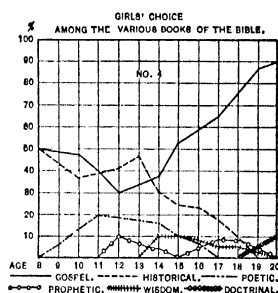
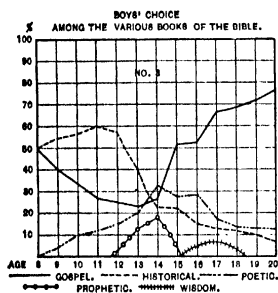
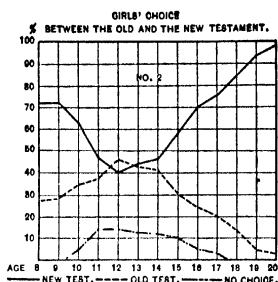
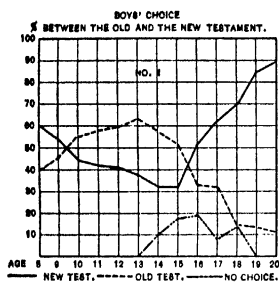
vidual expands and approximates the dimensions of the ethnic consciousness.

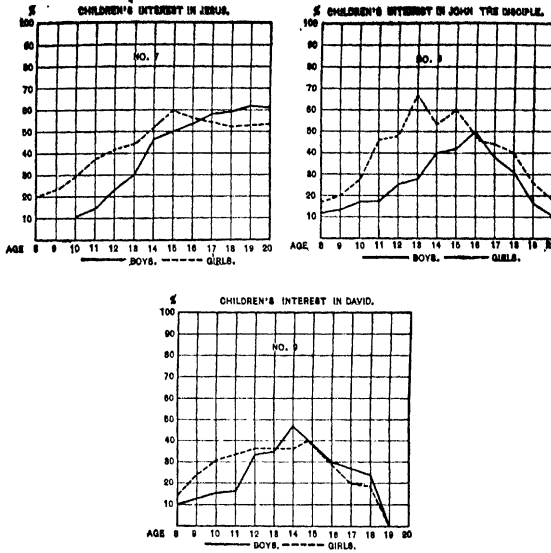
This brings me to my special theme. One of the best educational signs of the times is a growing sense of the importance of the Sabbath-school and the greatly increased attention given to all methods of religious training for childhood and youth. Perhaps never have the limitations of the Sunday-school, at least in the way of scant professional training for teachers as well as in time and attendance, been more keenly felt or the demand for an improvement upon existing methods been more urgent than now. This is seen in many new tentative methods and schemes; some by scholars which usually lack adaptation; others by nonexperts animated by zeal and love of imparting the blessings of religion to childhood, but liable to lack in knowledge or pedagogical quality. Those of us who are in quest of something better ought first of all to pay the heartiest tribute of gratitude to all those who have contributed to current systems, which were an immeasurable advance over those which preceded them, and I wish first of all to say with the greatest earnestness that, if in some of the positions taken here I differ from present usages, it is not without a profound sense of gratitude and obligation to previous workers, and with the recognition that it is their work that has made further progress imperative or even possible.

As a special teacher and student of the human soul as well as of education, religious teaching has long been a center of interest, and several of my best students have at my suggestion published careful and comprehensive studies of different aspects of the subject.¹ Indeed, psychology presents a new standpoint in looking, as I have said, primarily at the nature, needs, and power of the growing soul of childhood during its

¹ The New Life: A Study of Regeneration, by Arthur H. Daniels. Amer. Jour. of Psych., Oct., 1893, vol. 6, pp. 61-106. Sunday-School Work and Bible Study in the Light of Modern Pedagogy, by A. Caswell Ellis. Ped. Sem., June, 1896, vol. 3, pp. 363-412. Psychology and Pedagogy of Adolescence, by E. G. Lancaster. Ped. Sem., July, 1897, vol. 5, pp. 61-128. Children's Interest in the Bible, by George E. Dawson. Ped. Sem., July, 1900, vol. 7, pp. 151-178. The Pedagogical Bible School, by Samuel B. Haslett, New York. F. H. Revell Co., 1903, 383 p. A Genetic Study of Veracity, by Edward Porter St. John. Ped. Sem., June, 1908, vol. 15, pp. 246-270. The Religion of Childhood, by J. R. Street. Homiletic Review, May, 1908, vol. 55, pp. 371-375.

successive stages, and in basing methods upon this knowledge. In what follows, the writer must seek indulgence if occasionally in the interest of brevity he seems sometimes dogmatic.





The purpose is to define a few fundamental principles that rest upon solid psycho-pedagogical foundations, and to plead for such modifications in present methods, text-books, etc., as are necessary to conform to them. I know of no previous attempts, unless in part some of those just referred to, to appeal to the principle of psycho-genesis in this field, and while the following attempt no doubt shares the limitations of all first efforts in new directions in a great field, I have slowly grown to have much confidence in the principles below, as resting upon solid psycho-pedagogical foundations, according to which I think all methods, text-books, and helps should be made.

I. The Old Testament should predominate over the New for boys and girls before the dawn of adolescence. This by no means excludes instruction in matters pertaining to the New Testament, but it is a matter of relative time and energy. I know of no scheme of Bible work that has recognized this principle, which is very plain from our present knowledge of

the characteristics of the different stages of youthful development. Although this had been repeatedly said before, it was reserved for Prof. George E. Dawson to supply statistical data.¹ He circulated some 14,000 *questionnaires*, and from the, it must be confessed, all too meager returns he received, constructed a curve of the interests of American Evangelical Sunday-school children, from which it appears that, at the age of eight, some sixty per cent of the boys and seventy-two per cent of the girls are more interested in the New Testament than in the Old. About a year later the lines cross, indicating equal interest, and from thence interest in the New Testament declines till a minimum of thirty-two per cent is reached for boys at fourteen, and for girls thirty per cent at twelve, after which the New Testament interest increases steadily at least to the age of twenty, where his census ends. The preceding curves of interest, on pp. 156 and 157, explain themselves.

It is a cardinal principle of pedagogy that interest is the best index of capacity or pedagogical ripeness. It is, like hunger, an expression of need. Literature abounds in illustrations of the vastly greater rapidity and ease of every kind of education when interest is enlisted, and of the superficial and even health-destroying effect of knowledge forced on minds deficient in interest. While shallow interests can be easily generated by adults, whose inevitable weakness it is to mistake the semblance for the thing, the deeper, more irrepressible instincts that need no solicitation are the only organs of true apperception and of permanent acquisition. The nascent seasons, when the soul is ripe for the impregnation of sacred truth, which are now being determined for the various secular studies as all conditioning and dominant, are the seasons of the efflorescence of interests. Interest is the first manifestation of superior talent and genius, to follow which leads to eminence and to neglect which makes children commonplace and monotonously uniform as well as chronically fatigued. For pedagogy, indeed, *interest* is a word which looms up almost like the mighty word *faith* for the Christian. Nor is it psychologically unlike faith in its generic, but is so only in its specific qualities. It predisposes to knowledge, insight, and

¹ *Children's Interest in the Bible*. Ped. Sem., July, 1900, vol. 7, pp. 151-178.

belief, and each stage of childhood and youth is marked by its own set of dominant interests or "nascent periods," to neglect which is almost like grieving and sinning away the visitations of the Holy Spirit.

To teach the young we must go to them and take them as they are, understanding their weakness, limitations, and ignorance with the deepest sympathy; we must turn our backs resolutely upon the standpoint of the adult and not offend the little ones. If the burning words of Jesus suggesting the fit penalty for those who do so were a sentence to be literally executed, millstones would be in great demand. "Daniel in the Lions' Den" was the most attractive scene in all the Bible to boys, who associated him with lion tamers in menageries, with Daniel Boone, etc. David and Goliath thrills the boyish heart because it is a fight ending in blood, and the victory of the smaller but better man, and because the sling interest culminates at that age. Many boys, as they confess, are interested in the crucifixion at this age because it is an execution, and they bring to it some of the same zest with which they read the newspaper columns of hangings and murders. Samson, the Hebrew Hercules, is an especial favorite when the athletic pulse begins to beat high just before the teens, and the romance of Joseph's life appeals to them far more deeply than that of the precociously pious Samuel. The incidents in the lives of Abraham, Moses, Saul, David, Joshua, Balaam, Elijah, Elisha, and Jacob; manna and the quails; the brazen serpent, and later, stories of Ahab, Jonah, Ruth, Esther; Cain and Abel as illustrating the agricultural and the pastoral stage; the captivity and return, some of the prophets, some items of the law, awaken interest in an order yet to be more definitely and minutely determined.

Children of this age lead a life eminently objective; they look outward, and should not be encouraged to look inward. They love exciting events, battles, the flood and tower. They admire character, for this is an age of intense hero worship, and interest in persons is necessary to animate interest in causes, ideas, all geographical localities, ceremonials, etc. It is the age, too, of justice; all studies of the rules of games show that the ideals of fair play are never higher or stronger. Boy punishment for overstepping the law of justice is remorse-

less and sometimes cruel, as were Jehovah's. The sense of law looms up in human life long before that of the Gospel. The Old Testament, too, has a far greater variety of striking events, a greater wealth of history, a larger repertory of persons, dramatic and romantic incidents. Moreover, this is the stage of life when the boy, who repeats and recapitulates in his development the entire life of the race, is at the same stage in which Old Testament events live, move, and have their being. Fear, anger, jealousy, hate, revenge, but not yet love, are strong and often dominant. The lower motive powers of human nature, which furnish the mainsprings of life, are now being developed, and the age for unfolding the higher powers, which control and direct these aright, has not yet come. The more we come to understand the real nature and interests of boy life; how this period is preëminently the age of drill and discipline and, if so dangerous a word might be used, of a higher animality, egoism and selfishness, when currents of support, knowledge, and guidance all flow to the child, and the sense of earthly, may gradually emerge into one of a heavenly, parentage that is wise, somewhat stern and not precipitately longing to forgive, not too easily swayed by petitions or tears, if ever so vague, nevertheless giving a kind of resonator reinforcement to parental authority, wise enough to compel acquiescence at least in the depths of the soul, and, even though training may seem severe, with hope and trust at the bottom—the more we shall realize that the nature and needs of this boy stage of life are so well met in the Old Testament that they actually supply a new and very cogent confirmation and proof of its supreme pedagogical quality and essential truth, which has never yet been recognized.

We have long been taught that the Old Testament prepares for the New; that what lay concealed in the former stands revealed in the latter, but in our Bible teaching we have not only ignored this obvious fact and confused the two without any reason, but have sometimes reversed this law as if the New Testament were the only introduction to the Old. We are told that Christ came in the fullness of time, but our Sunday-school authorities would seem to imply that he made a mistake which they must correct, and in this they violate a cardinal principle of Christianity itself. Again, the old Testa-

ment is taught as full of prelusions and prophetic anticipations of something higher; in exactly the same way boyhood is permeated with premonitions of the great new birth of adolescence, and in this respect the Old Testament prepares for the New. All this is true whether we interpret the Old Testament literally as old or allow the new higher criticism, which gives such different interpretation of the stages of development of Jehovah worship and the rise and function of prophecy. The Old Testament is the most vivid and complete picture of the development of the moral and religious consciousness of the race; here the Semitic mind most exceeds the Aryan, and it affords a wide and pedagogic proportion of immanence and transcendence. It stimulates profoundly the sentiments of awe and reverence on which religion rests in the human soul and which precede the dawn of the altruistic impulses. Hence, while the prophecies are not yet appreciated, Job and the wisdom books and Psalms not fully comprehended, and therefore should not receive the chief stress of instruction, their influence should be felt and is deeply formative.¹

II. The second and somewhat complementary principle is that the New Testament is chiefly for adolescence. Jesus was animated by the great principle of love and self-sacrifice, and these motives cannot be comprehended by the mind or deeply felt by the heart until the dawn of that great physical regeneration, when love takes up the harp of life and smites on all the chords at once, the very recent study of which from so many points of view marks an important epoch in our knowledge of the development of the human soul. To understand the broad and deep import of this principle, it is necessary to have some knowledge of writers like Marro, Lancaster, Burn-

¹ Many, says J. E. Mercer (Is the Old Testament a Suitable Basis for Moral Instruction? Hibbert Journal, January, 1900, vol. 7, pp. 333-345) refuse to allow the existence of moral difficulties in the Old Testament or dissolve them in the glow and fervor of unquestioning faith, while others if pressed admit difficulties but think it wiser to let sleeping dogs lie. The fitness of the Old Testament as a basis for moral instruction is certainly open to grave question. Jesus often referred to it but to contrast its immaturity with his own higher teaching. We must beware of relapsing to the lower morality of old codes and in many respects certainly that of the ancient Hebrews was inferior to our own. We cannot worship to-day the Old Testament Jehovah for both moral and intellectual grounds. The higher criticism does not relieve the situation.

ham, Leuba, Starbuck, Coe, and perhaps a score of others, who have so recently contributed to this great turning point of life from the predominance of ego-centric to altro-centric motives. Into this I cannot enter here.¹ Suffice it to say that boys before twelve or fourteen have normally little real interest in the character, life, or teachings of Jesus, and it is a bad sign if they do. There is little in their souls that responds to the Gospel. Here again it is easy to work up a superficial interest as a Sunday-school artifact, but this is because of the long historic and instinctive subjection of child to adult life. The danger is that precocious interest in Jesus will result in conceptions of His character and work that will dwarf more adequate ideas later, and that a premature interest in Him will interfere with the great deepening and enlargement of the affectional nature which the early teens bring. Juvenile piety in any drastic sense is always a dangerous thing. Boy Christians illustrate John Stuart Mill's description of very early risers who are conceited all the forenoon and dull all the afternoon and cross all the evening. Much current Sunday-school inculcation is psycho-pedagogically analogous to trying to teach boys of this age the nature and responsibilities of married life. Precocious training before the advent of its proper nascent period is always open to two grave objections: the first, that it is a waste of time to teach by labored methods what would come of itself later; and, second, it leads to a preformation and preoccupation of both heart and brain that rub the bloom, zest, and force off these subjects, so that when the time is ripe they seem stale or deflowered of interest, and are met with indifference and ennui. Third, and worst of all, narrow childish images, conceptions, and thought forms are already developed and made so hard and rigid by the great sense of the importance of the subject that their transformation is difficult. Who has not been struck by the falsetto notes in prayer meeting and in descriptions of religious experiences, which remind us of the old reading-book poem of "Orator Puff," with two tones to his voice? It is the calamity of Christianity that its ideas and experiences are too often characterized by notes of infantilism due to arrested religious de-

¹ See this point explained in my *Adolescence*, vol. 2, chap. xiv.

velopment. Just as we can spoil hand writing by forcing it too early, and condemn to life-long school tricks, like finger counting, by laying too early stress on arithmetic, etc., so in religious instruction there are the same dangers, but vastly greater and more calamitous.

No doubt some children can be taught to love Jesus as a kindly, sympathetic being very early in life, and at puberty this sentiment can be normally deepened and broadened without any radical change of nature, but child piety is another and very dangerous thing. Children have a strong animal and even vegetable nature, upon the full development of which in its season as much depends as upon the growth of the stalk which is to bear the flower and fruit, the foundations for the house, or the fundamental to accessory muscles. Here again modern pedagogy and psycho-genesis have a vast wealth of confirmatory material which can only be referred to here.

On the other hand, adolescence is marked by experiences and temptations unknown before. It has the gravest dangers. The curve of criminality rises rapidly, and the large number of most frequent commitments to various penal institutions is greatest in the later teens. It is the time when the ancestral traits of character appear. New tendencies, serious plans for the future, sympathy, pity, philanthropy, and the social feelings generally are either newly born or greatly reënforced. This is the time when Jesus's character, example, and teaching is most needed. He was Himself essentially an adolescent, appearing in the temple at the early oriental dawn of this period, and dying hardly past the age of its completion when the apex of manhood was reached. This is the golden period of life when all that is greatest and best in heart and will are at their strongest. If the race ever advances to higher levels, it must be by the increments at this stage, for all that follows it is marked by decline. Jesus came to and for adolescents, in a very special and peculiar and till lately not understood sense, and, just as it is pedagogically wrong to force Him upon childhood, it is wrong not to teach Him to adolescents. Their need is so great as to constitute a mission motive of even more warmth and force than those that now prevail. No matter for what creed, race, or degree of civilization, and no matter what we think about His deity or even the veracity of the record, I

am convinced that there is no career or character in history or literature that so fully meets the deepest needs, supplements the weaknesses and defects, and strengthens all the good impulses of this period as His. This I can urge with a full heart and mind upon Turk, Jew, atheist, idolater, or ethical culturist, and I believe that everyone well trained and instructed in modern psychology and pedagogy could do the same even though he denied all the supernatural traits and incidents in the life of Jesus, or even thought him a myth. He could still say this grand tradition or ideal is true to the human heart and experience because it finds it and saves it better than anything else at this stage.

Here, again, Professor Dawson's curves are full of interest. If it is surprising to see the development of Old Testament interests before puberty, and that under conditions which lead us to believe would be far more marked if the Old and New had an equal chance with the children, it is still more striking to see the rapid rise of the curve of interest in Jesus from fourteen on to twenty, with which year his census stops. Paul arouses almost no interest whatever at this age save a slight one for girls after eighteen. There is little in his life save the viper incident that appeals to boyhood, little in his character and less in all his writings that appeals to youth. The place for stress upon his work is later. The Gospels are essentially adolescent, and this nascent period is a day of grace which must not be sinned away. No age is capable of such hearty unreserved devotion to Jesus as adolescence. The sublimity of His teachings and His motives, the meanings of many of the fifty parables, the Messianic expectation now realized like the prophetic dreams of boyhood at the advent of this age, the temptation, the Sermon on the Mount, the characters of John and Peter, which in the Dawson census are preferred even to that of Jesus, the heroism in the face of danger, the complete devotion that sacrifices life itself for what is dearer than life, the slow development of a subjective side of life and of an inner oracle of right and wrong, the tender budding conscience newly polarized to right and wrong—all these in their depth and inwardness appease a real psychic hunger.

Here, again, we see how the child and the Bible developed in a parallel way. Primitive man, like the boy of twelve, lived

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in a world in which the senses are most acute and keenly discriminative and receptive, as Gilbert and others have shown, and when the efferent or motor activities are more varied and sustained than at any other time of life, as Johnson has made plain in his studies of the play instinct. Yet all this harmony and fitness is rudely violated by current methods, one of which actually reverses this order, teaching the New Testament first and the Old last, and the other with a seven-year course which hopelessly confuses this plain order of nature, oscillating with no reason or motive from Old to New, and that, too, with a wooden uniformity which did a certain good service in its day, but which is directly in the teeth of all modern elective and even individual studies that have transformed secular teaching.

III. In teaching Jesus His humanity should be first inculcated with wise reticence concerning His deity and all the supernatural elements in the Gospels. With little children under eight or nine we can and should teach at Christmas the nativity, and at the Lenten season ending with Easter, the death and resurrection. At the very least, whatever the parents' creed, these are current traditions without understanding and feeling which the child is unintelligent and ignorant of much that is best in art and literature. There is a distinct age when fairy tales, myths, and legends involving abundant supernatural factors are needed to exercise and open the receptive powers of the soul, and there is a distinct age some years before adolescence, as Barnes has shown, when doubt begins for the average child. Santa Claus and Jack Frost are perhaps first to be transplanted from the realm of fact to that of imagination, and the question—Is it really true?—may be hypertrophied and made abnormally insistent by wrong methods; and, during the years which intervene between this period and adolescence, the human Jesus with little admixture of any thought of divinity should be as firmly established as possible in both the knowledge and affections. Children love biography. A personal element needs to animate even geography, and earth should be taught as the home of man. Here, again, as Dawson urges in substance, we should beware of investing Jesus with the mysteries of the Trinity and Incarnation, because this is sure to detract from His simplicity and natural*

ness for children. He must be given a secure place in the earliest affections first.

Sunday-school teachers are especially prone to violate this rule. They cannot wait to tell the little ones that Jesus is the son of the supreme almighty God, that He came down from heaven in a mysterious way and died, and went back according to a preconceived plan. As Bushnell said of religious teachers as a class, they are prone to precipitate haste for immediate results, and are striving to reap where they have not sown and before they have sown, forgetting the law of first the blade, then the ear.

The results of this method, as now apparent from modern explorations of the content and state of children's minds on this subject, are sad in the extreme. Jesus is conceived as, if not a kind of centaur, a somewhat ghostly unreal being, human in all but His blood, which was the blue ichor of heaven, and gave Him an indigo or cerulean complexion, as some say; God above, man below, or God within masquerading in a human exterior, or sometimes a kind of docetic phantom and occasionally, to the plastic childish fancy, a really monstrous being. He is to be approached with a peculiar attitude and with faculties attuned in the most unnatural way. To some children He is a mongrel being whose deity and manhood crossed have neutralized away every salient or interesting trait in both. Some describe Him as transparent or blue, with a rainbow around His head, floating in the air, fond of night and graveyards, with a reservoir of divine knowledge and power, which it was very kind of Him to repress; but all of which tend to remove Him from that close natural contact with the heart without which the teaching of Him is of no effect. Thus teachers take away the human Jesus from children; for them antipedagogical methods make the incarnation, however it be interpreted, of no effect, and we are no longer surprised that John and Peter are more real and interesting to children than Jesus. Many Christologists now teach that Jesus grew to a sense of immanent deity only late in His career; but, if so, here again we invert nature and enforce the later adult insights upon childhood—a pedagogical fault which is like beginning with the cube root or the calculus instead of at addition or subtraction, and ignores the necessity of first filling His

humanity with all the grandeur it can hold, so that belief in deity, if it unfold, will come like a welcome surplusage or overflow of all that our conceptions of humanity can contain.

Not only do our Sunday-school methods thus tend to make the Gospel teaching of no effect by their traditions and weaken the natural power of the plain record itself, but they thus lay deep the foundations of later skepticism. The recent convert or the warm-hearted Christian parent, who must impart his or her latest insights to the youngest, who has just attained to a deep sense of deity in the Bible narrative, lacks the reserve and control that is best for children. Pedagogical dedivinitizing or making purgation of the traditional superhuman factors may be hard, but so is it in seed time to wait for the harvest; but the teacher must not forget that the heart of early adolescents can only go out toward those persons and objects that are most real, vivid, and human, and that every intimation or suspicion of an alien element is sure to weaken love. Then, more than at any other period, the child is a humanist, and, like the old Roman, deems nothing human alien from himself. Then he is least interested in anything either super- or infra-human. Thus, everything that tends to make Jesus natural—all comparisons with the heroes of fact or fiction—are helpful. If we ought to borrow from our Catholic friends some of the more vivid presentations of wonders and mysteries of the saints for the period of early childhood, here all Sunday-school teachers should sit at the feet of our Unitarian friends. A careful study of their copious Sunday-school literature convinces me that, whatever else may be said of it or of them, nothing so fits the nature and needs of children in the early adolescent studies of Jesus as their methods and ideas. The amalgamation of God and man, whether it result in an alloy or in a more mechanical adjunction of parts like the prophet's image, is almost certain to leave in the mind pictures, thought forms, and concepts that have to be reconstructed later if the soul is not stunted but grows on toward maturity. Conceptions of the supernatural will thus surely be weeded out when the almost inevitable skepticism of manhood comes, and this is likely to make more or less havoc with the mind and heart condemned to a needless pain and labor of reconstruction. Hence, it is a pedagogical lesson of great moment that fixed

thought forms of all that is transcendent or supernal, especially those which pertain to reason rather than to imagination, should be kept plastic as long as possible and not be allowed to harden into dogmatic rigidity, as precocious conceptions are most of all apt to do. What we know of the adult mind shows us that ideas of the superhuman formed early in life are more likely than any other to become indurated and encysted in a way which interferes with the expansive growth of both the heart and the head.

IV. Have stories predominate, especially for young children. What may be called the Sunday-school parts of both the Old and the New Testament are mainly narrative. Events are chronicled in the temporal order in which they occurred. The relation between ancient story and history is even closer than the two words suggest. A panorama of events with most sequence in it, where the items are causally or even temporarily ordered, has a strange power over the human mind, which these days, so degenerate in this respect, know little of. In ancient times, when the whole body of culture was transmitted orally and in the form of tradition, nothing could live which had not vitality enough to sustain itself in memory, while printing keeps alive masses of more or less worthless matter, and has quite transformed the scope and methods of memory. Alliteration, assonance, rhythm, and finally rhyme, had once a very high mnemonic value now largely lost. We have in a recent book an admirable description of a typical Oriental story teller in the Punjab. Dull, moping, dreamy eyed during the day, at night when the camp fires were lighted he began to weave the wondrous hypnotic charm of "once upon a time," while his hearers, like those of Æneas of old, *omnes intentique ora tenebant*. He warmed himself as the record grew absorbing perhaps till, like Plato's rhapsodist Ion, or like Schopenhauer's contemplator of a great work of art in the acme of his hedonic narcosis, he was entranced by the fervor of his own eloquence and became oblivious of everything else. Thus, we may conceive the function of the ancient minstrels and bards; thus the elements of the "Iliad" and "Odyssey" were woven into effective shape before Homer. Ezra, it may be, knew how to conjure with this charm when he read the ancient records all day to the people who hung upon his lips.

Thus, ancient literature lives its own real life from mouth to ear, and is not banished to the long circuit and far later pathway of transmission from hand to eye.

I do not believe in withholding the Bible from the laity, but I sometimes almost wish for a law against printing some of the grandest traditions of the race. There is no rainbow of promise set in the heavens against the great and rising flood of printer's ink, which threatens an evil even greater than that of bringing the lightest things to the surface; namely, that of submerging and hiding the best. Taine classifies literature according to its natural surviving power, beginning with the most ephemeral, like the daily paper, which is old to-morrow, and ending with the great classical works, which interest all men and women of all ages and cultures. I sometimes fear that modern educational publishers are in danger of meriting a condemnation akin to scribes, Talmudists, the Epigoni, who multiply trivialities, notes, comments, and puerilities of old works and devices, and launch cheap novelties that distract us from the best. The average day or Sunday-school teacher who writes new songs, poems, stories, and prints them as attractively as old illuminators magnified the letter at the expense of the spirit, are in my judgment doing a sorry service for the very cause of childhood and education they think to serve. Let me tell the stories and I care not who writes the textbooks.

Children's stories are very simple, but objective. They should be graphic, serial, with the incidents perhaps connected, as Professor Palmer has shown, with a long string of simple copulas, so that the child story as he shows is, in this sense, essentially Homeric. At the very first many obvious and commonplace things will do. It is well to match the object or daily experience and the words, but when the soul learns what speech can do and takes flight in language, then the imagination takes up the harp and sheds a little of the light that never was on sea or land, and makes the child a possible citizen of all times and a spectator of all events. A good raconteur does not need to get down on all fours to the child, but can bring the child farther up toward his level by his art than by any other. Moreover, we talk much about mental unities, correlation and coördination of studies to knit

the various factors of the mind together, so that we can command our resources and bring them all to any point; but I urge that nothing organizes more complete unity out of many diverse elements than a good story. The child's unities are dramatic, and the good story teller does all that Plato ascribed to the good musician. He knits the soul into cohesions and cadences it to virtue by the endless repetitions, refrains, and intonations that children love and thrive by.

Hence I plead for a new profession—that of the story teller in the Sunday-school, who has practiced on the standard tales, told them to various grades and had them told back again, until they are as well developed in his or her mind as the rôle of an actor in a play with a long run, who never loses *rapport* for an instant with his audience and can preëstimate the value of every point or even gag in it. Can we not have in the Sunday-school these Bible bards, though each have a very small kit of stories, which they can tell from long practice better than anyone else? Rein makes, I think, thirty-six Old Testament stories about which he would have the third year of secular school life focus. Others make many more. The best test I know of in the teacher of young children is a power thus to catch and hold the attention of her restless group, well compared to scores of corks in a washtub to be kept under water by a teacher who has but ten fingers. A good narrator can do almost anything with children. He can repeat the magic of the Pied Piper of Hamelin, who charmed them all from their homes by the incantation of his magic flute. Such a teacher has recovered for a world to which it was lost the true pipe of Pan, which reveals the secrets of the world, and the lute of Apollo, which constrains all to pause and listen.

Of course I would not eliminate some memory work on well-chosen passages, but these should be not indiscriminate and almost random, after the fashion of the modern "golden texts," but for young children should chiefly appeal to practical morality like proverbs or to the sentiment of poetic sublimity; for older children texts expressing a greater variety and depth of sentiment should be added. There should, of course, be something in the way of preparation, but fully as much in the way of review. For children, archæology, philology, contemporary history, and results of modern research and

scholarship generally should have a very subordinate place. Notes, lesson books, and helps of all but the simplest kind are a delusion and a snare, for they distract interest, break up unity, and morselize everything. A simple map or two and a very few pictures are sufficient. While the cheap prints now possible of the great pictures of Christ, Mary, and other personages in the Bible may be shown together with illustrations of the temple, ark, costumes, etc., we must not forget that the modern picture cult may easily become excessive, and interfere with the development of the imagination. A few rude cuts seem to start this faculty to do better, but too many clip the wings of fancy and sterilize the wonderful creative power of childish reverie. In all this we have the difficulty of determining just in what sense and how far the child repeats the history of the race, what stage of psycho-genesis corresponds to that of the old story teller; but let us not forget how much religion owes to the imagination, which is the organ of everything not seen, which has given all the form they possess to the events of ancient history and to the transcendental life as well. Even for the apostles and the great missionaries, preaching consisted in simply telling the old story, which has not lost any of the ancient power inherent in it, although we have lost the psychic orchestration to set it in scene befitting our stage of civilization and the degree of the hearer's development.

In the piles of Sunday-school literature I have looked over in recent years, I find happily among many better things the most antipedagogic methods known in the history of education. One requires children of seven and eight to memorize the "six s's"—sin, Saviour, salvation, sacrament, sanctification, and spiritualization, which with all the teacher's gloss can mean little more than abracadabra, and is a kind of mind-breaking process, the cruelty of which is seen just in proportion to our knowledge of the soul. The kindergarten processes illustrate the worst side of the American aberrations of Froebel. Sheep's wool is shown, handled, sheep are drawn, pictures of flocks of them are shown and symbolic meanings hinted at, although for the child happily a sheep is a sheep for all that. A yoke is drawn or made of sticks, a door, a heart, a rock, an anchor, a crown, a cross, wheat, a harp, a palm, a trumpet, lamp, staff, shield, dove, an open book, the word

prayer is written up, down, right and left, a pyramid with twelve steps, each of which is a symbolic quality. One intermediate class is required to memorize nine abstract moral qualities in a certain order, a list of dates, initial letters signifying either adjectives or the first words of texts, various crude blackboard drawings, with ointment, fish, pearls, lilies, stars, vines, boats, graves, pools, harvest scenes, sand work, kindergarten, sewing cards, and so on *de omnibus rebus et quibusdam aliis*. All these things are offered to the child almost at random as if in hopes that the good Lord, who in the beginning brought order out of chaos, will here repeat the great cosmic ordering in each mind. Children of ten are asked to name six traits in the character of the Saviour, to tell the five things essential for the Lord's Supper, to repeat six adjectives designating attributes of Jesus, to watch against eight things; sermonettes are preached on symbolic meanings of the phrases, "He ran before," "He saw Him," "passed through," "knew Him not," "abode with Him," "they murmured." Parallel passages are sought for "knowing the time," "rolled away the stone," "took bread," "watched one hour." They are taught how God is in the mind, heart, life, and memory; how God is living, holy, present, mighty; how He must be served holily, seriously, reverently, prayerfully, etc. These are systems actually in use, and nothing in my judgment could be better calculated to disintegrate the mind, to make it like a well-used piece of blotting paper, to confuse the conscience until it is like a magnetic needle, the orientation of which is lost, so that anything can seem casuistically right, to sterilize the heart, and to give the natural interest which the child feels in religious matters immunity against its infection by vaccinating with doses of attenuated culture.¹

¹ Elsewhere we are told that the up-to-date teacher of Sunday-school teachers, who assumes the soundness of current fundamental pedagogical and psychological principles, has a vast repertory of devices and educational knick-knackery and jim-crackery. The superintendent, like the President of the United States, must have a cabinet to advise him. If the lesson is on the seven-year-old King Joash, he generates interest by calling to the platform a seven-year-old boy and asks the school if he would make a good president. In his quest for object lessons or perhaps at a platform review, he illustrates the unseen but not unfelt power of the Holy Spirit by a magnet of iron; the blinding power of lies and other sins by a veil; the complexity of the human body by the watch with long-drawn-out parallels.

The kindergarten in this country is in a transition state. The conservative and ultra-orthodox disciples of Froebel here have materialized his principles until, as I have elsewhere shown, they have reversed many, if not most, of their master's basal conceptions. The recent alliance between this element and the Sunday-school has produced some unique products. The disciples are represented by twelve tiny sticks on end; the house of many mansions is made first for, then by, the children by piling six kindergarten blocks; a paper boat is sailed on a sea of green tissue crumpled for waves; vines, thorns, thistles, are cut from the field and laid on the table; wheat heads are stuck in the sand, on which a tumbling block house is built beside another on a stone; the widow's mites are two tiny stones laid on a sheet of paper. This trivialized and puerile busy work no doubt keeps the young children quiet by giving them something to do, but like all the great body of Sunday-school artifacts and products of premature or overclassification, sermonesque methods of keeping tab on great subjects by enumerating adjectives, verbs, or abstract nouns, it illustrates a story of Lowell's of a poultry raiser who by dint of much crude chemical experimentation and reasoning worked out and published a conclusion that he had discovered that

The leader must be a good blackboardist and know how to sketch crosses, crowns, ships, serpents, lamps, and symbols. The teacher must know the birthdays of every member of his class; induce one pupil to influence another, follow up the sick and "shut in"; have them kneel in a mathematical circle for prayer. He must plant corn and the dahlia bulb and expatiate on the fact that each cannot produce the other to illustrate that what we sow we must reap. He shows a blank book to impress the idea that each day is a page. The leader calls a boy to the platform, blindfolds him, gives him one end of a thread and leads him about, and then makes him break it to illustrate how Samuel followed the Lord. He brings in a rat trap to illustrate Satan's snares. All the teachers file up and wet their handkerchiefs in cologne and wave them to illustrate Mary's ointment. He burns a match to show how the tongue is a fire; brings the plate holder of a phonograph; plays on the piano to illustrate that life is a harmony; takes great heed of collections and interpolates frequent treasurer's reports, is very strong in keeping order and rich in methods; has premiums and rewards and makes entertainments and sociables a field where novelties are assiduously studied. The catalogue of the library must be graded, and the librarian must love books and children and be well up in the methods of cataloguing and keeping records. Perhaps there must be a hospital corner for children who have sick hands, feet, temper, and tongues. Are not all these things recorded in the chronicles of the tribe?—(G. M. Boynton: *The Model Sunday School*. Cong. Pub. Co., Boston, 1892, 175 p. A. F. Schaffner: *Ways of Working*, Wilde, Boston, 1901.)

celery prepared in a prescribed way had the most marvelous effect in fattening ducks for the market. It was cheap, easy to digest, produced meat of the rarest flavor, etc. The only possible objection to it was that ducks would not touch it, they were so foolish. I once saw in the Paris Zoo a vast row of ducks so caged that they could not stand or move, and into the mouths of which this or some other food was hourly injected with a huge syringe, until they could hold no more. The fatty degeneration that resulted was thought a triumph of the poultry man's art for the epicure. This is not the way to prepare children for God. Children suffer in soul no less and in ways as closely related as is the mind to the body by forced feeding, but, although they may develop memory pouches for matter ever so alien to their needs, the healthy mind will not assimilate it. A cogent and new argument for the vitality of Christianity looms up in its power to survive methods so bad. The true shepherd of youthful souls no longer believes children depraved, and does not interpret Wordsworth's preëxistence conceptions as meaning that the child is an embryo theologian or moralist, but is sufficiently anchored in common sense to steer clear of extreme fads and vagaries, while keeping an open mind for all that is good in the new.

V. I plead for very select tales and other matters with a moral bearing from non-Bible sources. Rein would center the first year's work in the secular schools around twelve of Grimm's tales; the second about Crusoe; the third about Bible stories. Ahrens, the German writer, pleads for the admission of well-chosen tales from the classical antiquity as a kind of limbo school Bible between the Old and the New Testament for Sunday-school work. Bigg urges that an "ethnic Bible" be composed from a slowly elaborated canon of the best tales from ancient myth and classical and modern literature and history. The French Government authorized years ago an admirable manual designed to teach personal and civic virtue by illustrious examples, and now there are many of these. Mr. Frothingham's child book of religion supplies a few admirable tales. Choice fables from Æsop down to La Fontaine and Schleiermacher, selections from the Round Table cycle, from Homer, Virgil, Herodotus, a few of Plato's myths, Dante, now

briefly told with admirable charts in several manuals, some of the Norse and Germanic tales of Edda and Niebelungen, such as Balder, which I have tried myself with good results, selections perhaps from Andersen. Some or all of these might be used. For some hundreds of years the Bolandists have been writing the lives of the saints, now many thousand in number, whom the church has canonized for eminent virtue. Baring Gould has selected and digested some of these in his six volumes, and Mrs. Chenoweth and others have retold them effectively for Protestant children. Comte renamed every day of the year in his positivist calendar after some great thinker in science and philosophy in imitation of the saint days. Many of these stories have a tinsel air of ultra-saccharine goodness about them that hardly fits the modern or, at least, the Protestant, child with his early critical spirit, but reconstructed, naturalized, and selected hagiology will yield a precious deposit of golden deeds and heroic self-sacrifice here stored up as in a great arsenal.

The school itself in many places is now assuming the work of Bible teaching. The London School Board lately had a full syllabus of it occupying half or three fourths of an hour daily, with semiannual examinations. It is, of course, undenominational. Prussia requires at least five hours a week of religious instruction by trained teachers for eight years by the method of narration chiefly, with subsequent discussion and some memory work. The Schulz-Klix "Biblische Lesebuch" reached its fifty-third edition in 1896. In the schools of France, where no religious instruction is permitted, every Thursday entire is a holiday, so that parents can have their children taught the religion they prefer outside of the school, but the instructors, although selected by their respective churches, must, as in Germany, pass a state examination as a test of competency. To these we might add several well-arranged little handbooks like that of the women of the Chicago Educational Union or of Professor Moulton, containing select readings from the Bible for the school. All this work, of course, is undenominational, and the Bible is taught as literature and history.

This new reciprocity of subject matter between Sunday- and day-school cannot fail to help both. The matter is a great addition to the latter, and the former is incited to better

methods. Moreover, a great basal principle is involved. The Bible has come to be held superior to all other literature in Christendom because of its merits. The world is more and more reluctant to give its highest place to men or books because of their pedigree or origin. Scripture, we must not forget, became Bible by inherent merit and worth, and by this title alone it can remain so. Only those who know something of the power of the best pagan classics and of the ethnic Bibles, who have had some sympathetic presentation even of the Gospel of Buddha, the Bibles of Confucianism and Mohammedism, as well as of the great literary monuments, can judge comparatively of the merits of our Bible. I have not a shadow of doubt or fear that it will survive this inevitable and impending test, and that all comparisons may be safely challenged. But, further yet, only thus can it rest upon a solid and secure foundation of reverence in the individual soul. Abundant answers to syllabi indicate that, where children's minds have been fairly exposed to the contagions of all these sources, their suffrages confirm the choice of Christendom. There are, however, valuable lessons, religious as well as intellectual and moral, taught from these *ab-extra* sources, which are not contained in Scripture, and for which by the narrative method there is time even in the Sunday-school.

VI. *Nature Teaching*.—This is now urged with great force upon the secular school, and there are many new and most hopeful beginnings, but I plead for at least a small place, wherever the conditions are favorable, for inculcating nature as a means of developing the religious sentiments. These rest on awe and reverence and a *sensus numinis*, which makes the undevout astronomer and, we might add now, the irreverent chemist and biologist, mad. I would have no technical teaching of either methods or names in the Sunday-school, but a mythic or, rather, poetic standpoint developed which will encourage the child to that love of nature out of which have rolled not only the burdens of Bibles, but the best impulses that have created art, science, and religion. Bede looked through his rude telescope to turn aside and write a *gloria in excelsis*. Renan says Judaism owes almost its existence to the mountain phenomena and experiences at Sinai. The poet, who plucked the flower from the crannied wall, perhaps felt the

same pagan worship which in his remote ancestors was turned to Ygdrasil, and earlier yet to the Dodona oak. The sky and sea have had great agency in shaping man's religious instincts. It is to avoid the sad havoc which befalls every mind that thinks there can be an opposition between science and religion, both of which are expressions of the same deity. Just as I plead elsewhere for a good course in science in every theological school, so here I urge that even the rudiments of science have a direct effect. On their foundations, in part, true religion must forever rest, and the Sunday-school cannot afford to entirely neglect them.

VII. I plead for more purely intellectual instruction, first, for the Old Testament in its season, then during the earlier years of adolescence for the New. American teachers are prone to feel that the great disparity between the Bible and other literature indicates a radical difference in the method of teaching. This is the reiterated plea by which the systems now in vogue resist proposed improvements. There is a feeling that in the soul of the child once brought in contact with the basal truths of religion some mysterious, if not magical, process occurs of a totally different kind from the glow and tingle evoked by any secular literature. Almost any text, incident, picture, or name, it is felt, may be reinforced supernaturally by the agency of the Holy Spirit, and be made a means of salvation. Hence, the Sunday-school teacher feels that this heavenly muse is behind him seconding his efforts and supplementing all his intellectual defects of knowledge and even preparation, provided only he puts a heart of fervid unction into his work, so that prayer is perhaps a more important preparation for it than careful study. He no longer expects to see miracles in the natural world, but is always alert awaiting sudden transformations of mind, heart, and will in his pupils at any moment. Many teachers are thinking of either conversions or direct moral effects far more than of solid examination knowledge of Scripture.

There is a radical error here involved. The psychologist knows that laws of the soul are now no more suspended than those of nature; that to secure any result there must be a careful study of the ways of adapting means to the end, and the more judicious and wise the former the better will be the lat-

ter. Nothing would seem more obvious than the law that to best produce its best results, Scripture must first be well known. The deplorable fact now generally admitted is that children go through our entire courses and emerge with an almost incredible ignorance of the Bible. On all sides we hear this recognized and deplored, and I forbear to multiply incidents at hand. In this respect we have very much to learn from other religions. The best Jewish Sunday-schools I have seen, teach not only Old Testament history, but Jewish history down to the present time, and also the Hebrew language. Promotions are made by examination only. A council of the best available men sits in another room in the temple during the entire session, discussing ways, means, teachers, to which individual pupils are sent for reproof, reward, suggestions about health, to the physician, etc. I once followed one of these courses with considerable detail and with great edification. The best Catholic schools I know incite the children by competition and prizes, and award diplomas for the completion of the course, which is marked, as in so many other religious bodies, by confirmation. In Germany the accredited teacher of the Jewish, Catholic, and Protestant children pursues methods essentially like those approved by the secular school for teaching literature and history. Those who object to these systems because they do not turn out church members imply that a scholarly system is more unwise than an unscholarly one. Is it not rather plain that we want all this and something more, and not something less? I urge that a good teacher, even though not a church member, may fill a very important place in the Sunday-school. Is anyone so ignorant as to suppose that these methods of teaching are the cause of the small church attendance in Berlin? If so, let us reverse our efforts, and, if not close the Sunday-schools, at least stem this rising demand for better pedagogic devices, and go back to the catechetical method of our forefathers and the time when a far larger proportion of Sunday-school children were converted than now. It is possible to stir the sentiments superficially, more intensely, almost inversely to the amount of knowledge. Rude people and ages are impressionable and susceptible to a degree which vanishes directly as culture increases. The objection I combat, therefore, really means, when psychol-

ogists interpret it, a plea for a return to a primitive condition which very few indeed here now consciously advocate.

VIII. The miraculous should have a prominent place, for it has a great function. The pedagogical aspect of the supernatural depends upon its psychology, and both represent unique standpoints so far quite unknown to both the scientist and the theologian. It is neither foolishness to be eliminated and no whit less is it dogma or even necessarily fact, but something higher and more vital. Man lives in two worlds—one the mechanical world of matter, force and law, of the things of sense and physical science; and another world of things imagined rather than objectively known, believed rather than proved, the world of poetry, of faith and hope. The one is the world of matter, whether crass or subtle as ether; the other is the super- or extra-natural world. The criterion of one is objective existence; of the other subjective need. In the one the head, in the other the heart, predominates. The organ of one is logic; that of the other feeling and sentiment. From another aspect we may call one immanent, and the other the transcendent world. If we take the larger view of nature, Schleiermacher is right in urging that there is nothing so natural as the supernatural. Faith, perhaps one of the mightiest of all words, the substance of things hoped for, the evidence of things not seen, cannot be sharply distinguished from the imagination, which is the most creative function of the soul.

I here carefully avoid a favorite occupation of many modern psychologists, who love to compare and analogize these two as both projections of the ego, using the processes involved in the cognition of matter to crassify and lend reality to things spiritual, using the latter to lend a higher degree of ideality to matter and force. Labor in this field is a life vocation now for many, but for reasons I have elsewhere shown has subordinate interest for me.¹ The history of thought shows that these two universes have always tended to be inversely as each other. A positivistic mind and age has little room for spiritual verities. In it the transcendent world fades and perhaps quite vanishes. In periods of the opposite bias men forget their environment and are absorbed in ecstatic

¹ G. S. Hall: College Philosophy. The Forum, June, 1900, vol. 29, pp. 409-422.

contemplation of far-away realities. As heaven and hell grow real, finite existence loses interest only to regain it with great emphasis when the objects of faith fade away. This is the soul's double housekeeping; here is the world of sight, yonder in the *Jenseits* of faith. The ascetic neoplatonist seer sacrifices all that makes the present natural life dear for these other world interests.

Perhaps animism marks the beginning of the great transcendent cult, for it ascribes a second interior or separable self to objects. Belief in spirits, ghosts, ancestors, mahatmas, angels, Zeus, Brahma, all conceptions of preexistence or reincarnation, all beliefs in post-mortem existence, where souls are herded, gods and demigods of every degree—all these are expressions not of objective reality, but of the needs of the human soul. They live, move, and have their being in the transcendentalizing factors of faith and poetic imagination, and here alone they will be real forever. The soul is their bearer, and in a degree far more pregnant than Schopenhauer's famous text, "the world is my concept," the modern psychologist knows and says "the spiritual world is my feeling instincts uttered and expressed." Not by conscious purpose or design does man make his own gods; they are rather the objectivization of his desires, innate longings, unconscious deposits of fancy. Nay, rather, they are not even these so much as the slow phyletic evolutions of the race soul. They fit his nature and needs because they sprang from them. They stir the deepest regions of the soul because they are its oldest formations. They seem more real than matter, and are nearer and truer because they are made of soul stuff and not of sense stuff. The original theological faculties of the soul were mythopoic, and Jacobi was right in a sense which modern psycho-genesis makes vastly larger than his "the heart makes the theologian." Pectoral theology is the true theology. Schleiermacher, the greatest genius of modern times in this field, was charged to the saturation point with this idea in his *Reden*, and the best part of his masterpiece on faith defines all religious verities as the formulations of feeling. True religion in even a higher degree than poetry or art is creative.

When that great day shall dawn, wherein the artist, who creates by efferent willed activities, takes his rightful place

above the professor who merely knows, religion will be revived in the best hearts and lives in a way and degree which it does not now enter into the heart of man to conceive. Then belief in the divine will not depend upon demonstrations, either of the old style familiar in natural theology or the new type which finds evidences of God in the nature of knowledge, but we shall realize the pregnant saying that, whereas men have vainly thought, from Anselm down, to confer honor upon Deity by carefully working out new proofs of His existence, forgetting that all that can be proved can also be disproved, it is wiser to leave the divine existence to that deeper, more intuitive region of the soul where belief closes in with its own with an instant affinity and certainty that leaves all intellectual proof far behind. Let us, then, restore and welcome the degraded word superstition as being of things above, and not below, the realm of mind. Nothing lies so close and so warm about the heart, and, although nothing so needs education, it is the faculty by which man is most above the animals.

Again, the feeling instincts with their organs, faith, and imagination, are larger and more generic than the intellect in a very different sense from that urged by Kidd. The faculties of this stratum of our nature are complete, while those which make up the intellect are fragmentary. They represent the race, while the intellect expresses the individual. But little of the former can come to consciousness in a single life, but by the belief function man is rescued from all his limitations of time and space. He lives everywhere and at all times. These are the totalizing powers which supplement the vaunted experience of epistemologists. It is by and through them that the soul becomes prophetic, penetrating the future, anticipating in far-off and ruder times the glories of Christ and of the golden all-hail hereafter. These proleptic powers in us are the whole human species divinely stirring in the individual, tinging his dingy life with the halo of uncreated light, reëncouraging the personal resolve of to-day with some of the momentum of the whole evolutionary process. Thus, when we perceive and reason it is our own isolated individual self; when we launch upon the great sea of feeling we represent humanity itself.

Now the higher truths of religion are revelations to the single self from cosmic man in us. They seem objective because they are not born in our own lives; they are not the object seen, but the power of vision itself. The absorption in a great work of art, the fervor that sometimes makes men fanatics and zealots, the lofty emprise of soul which believes because it is absurd, the insistence upon the preëminence of the great plastic creations of literature as classical or as even infallibly revealed, is because they speak the language of this larger man within us, and not that of empirical individual experience. For the former creations we love to throw the whole stress of conviction into such words as revealed, inspired, divine, and just in proportion to the completeness with which we realize their grand formulæ. The boundaries of personal existence expand until they become coterminous with those of *le grand être*, leviathan, or by whatever term we call the genus man.

This hard saying once fully realized, we are able to approach the questions, first, how to grade values from the lowest superstition up to the highest, and, second, what is the true pedagogy of the supernatural? The root of all superstition is a sense of something deeper and more real in things than sense phenomena teach. It is an outcrop of the *sensus numinis*; an age and a race in which it is excessive has great but utterly undeveloped capacities for faith. The very fecundity of fancy seen in animism, the gendering of all nouns in the personification of natural objects, the persistent mythic construction of the world, is the promise and potency of the highest literature, art, and religion. If these elements are developed coherently and shoot together into connected epics or theogonies—if the gods are organized into ranks and their lives or adventures elaborated, or any cult of spiritual beings is articulated, then the race is climbing the slow, hard way up to a culture period. If it remains incoherent and disconnected, or lapses to abject fears of incorporeal agencies, the ethnic stock in which this occurs aborts and becomes decadent, or at least reverts to a fallow state, to start again later. The highest races work over this culture stuff into forms of sublimity, beauty, and order; Olympus and all the demigods of Homer and the dramatists ensue. Highest of all must forever

be placed those races that not only organized the transcendent world, but brought its whole efficiency to bear for moral advancement. Not the *kalo kagatheia*, but the Semitic powers that make for righteousness become supreme, and faith merges with the underived and sublime ought of Kant's categorical imperative. This is the anabasis, the way up of the feeling instincts, which the catabasis, or the way down, reverses. We can now see the profound meaning of the etymology, the philologically criticised but sometimes psychologically probable origin of the word religion as binding back. As each soul unfolds it thrills anew as it comes in contact with the ancient verities of the heart like "vague snatches of Uranian antiphone," from which perhaps there is a sense of previous alienation, but now of complete at-one-ment, for it has found its own.

I cannot agree with some of my friends of the ultra-Unitarian and free religious camp that the supernatural has no place in the religious education of the young, but hold, on the contrary, that it has a place almost central and supreme. I insist that we misconceive and misteach it. Here, as elsewhere, education must begin with rudiments, and repeat the history of the race. Every child is through and through a fetish worshiper at a certain stage. Examine the contents of a boy's pocket, find the meaning of the smooth and pretty stones and trinkets that he takes wherever he goes, puts in cotton or near the fire of a cold night, lets down into wells and ponds to enlarge their experience, feels a sympathetic pang for if they are broken. Ponder the meager but precious literature now evolving of even adults who are inseparable from some mascot or shun some hoodoo, and it will be apparent that these are the same processes, psychic and physical, which bind the Bushman to his charmed amulet. The faith instincts of the soul are accommodated to such things in their nascent period, and they educate these faculties at that stage better than any other, so that he who knows nothing of the fetish stage is liable to be less able to grasp the transcendent truths of faith later. Again, the child's sentiment toward flowers, stars, favorite trees, the sun and moon, repeats, though evanescently, the history of the race in the religious evolution of which temples and elaborate ritual have grown up about

these centers. All were at one time the highest expressions of the religious sentiments in the world, so in the child's feeling toward animals we see abundant rudiments of totemism. His hero worship is the same.

Here, again, I would borrow from pagan and Catholic sources many discarded and, alas! now disconnected elements for my religious curriculum. Care should, of course, be constantly taken lest the mind dwell too long in the lower stages, but also to bring out the high educational value of the experience of transcending a lower for a higher form. Perhaps individual prescriptions of ghost stories, angels, fairies, apotheosized heroes will have their place when we have evolved a complete scheme that fits the soul. All the elements of the supernal which rest upon the intellect are cold, dried herbarium specimens, while these things live only when and where they are most deeply and profoundly felt.

If science is now a trifle inhospitable to these educational uses and values of the transcendent—if we have low conceptions of myth instead of conceiving it as the high art formulation of the unknown or the uncertain, as Plato did, it is because the psychology of the feelings is still undeveloped. They and all these creations witness to the fact that man is not yet complete; that the best things and the greatest things can never happen to the individual; that his soul is not unresponsive, but, rather, is a part of all that has been which reverberates in him. Have there been new things brought consciously into the modern world? If so, we must reflect that all that is thus entelechized in history was once only this germ of faith which can make and remove mountains. Its "not yet" is a rudimentary organ in the soul. This, whether a bud of the future or a relic of the past in the soul, whether a germ or a vestige, will have a great place in the evolutionary psychology of the future. It has inspired every prophetic leader who has walked by faith and not by sight, and to the proper guidance and unfoldment of this great group of most misconceived, now forced, now neglected, faculties, the religious teacher must bend his consummate art and study.

.. IX. The complete and ideal Sunday-school should make provision for maturer and cultivated young men and women according to principles not yet recognized. The Pauline writ-

ings are to some extent suited to this, but certainly not to earlier periods. This is true also, but to less extent, for the prophecies, which, however, pedagogically precede. Here, too, there should be some study of patristics, and the burden of church history belongs here. It would be ideal also to have a little comparative study here of the great ethnic religions with a taste of the philosophy of religion, and almost any condensed germinal matter in ethics and psychology would not be out of place. A dominant aim should be to expose to the mind the results of the highest culture in all these faiths, but in a way to warm and not to chill the heart; to break down the inveterate feeling that there can be opposition between science or philosophy and religion. I have known a successful study of the higher evolution represented by Drummond's "Ascent of Man," and of what is now often called the higher pantheism. In this new and higher story for which I plead there should be neither field nor faith for any conventional orthodoxies of creed. The type of mind once associated with the very name deacon, so far as this implied a perfervid defender of things as they are and involved an atmosphere of repression for any sincere doubt or *outré* opinion, should be carefully excluded. The atmosphere here should invite growth and expansion in all directions, and the period of circumnutation, before the young mind selects and clasps its support, should be prolonged. This should be essentially the stage of inquiry, where ingenuous youth brings its inmost burning questions and ideals. I plead for a distinct esoteric character here for thought directed especially to the future, recognizing that the ideals of the young are the best material for prophecy. Criticism, higher and lower, and all the general standpoints and even pagan ideals, which are so formative but so often repressed and neglected, belong here. This is the place for all the problems which Desjardins and his followers have raised in France and Germany.

In the past religion has been evoked to rescue its own heart from legalists, scribes, and Pharisees, to escape the thralldom of sophists and scholastics. Once Europe resounded with the call to save the holy sepulcher from pagans, and again to rescue the Bible and conscience from the church to individual control. Now a new rally, comparable with any of

these, is needed to rescue childhood and youth from perverse methods of teaching the highest of all subjects. While I am far from the egotism of comparing the principles above enunciated to the epoch-making thesis which Luther nailed to the church door, I insist that childhood is now no whit less in need of a reformation in its religious regimen than was the adult mind then. Yet the magnitude of the work grows to a significance not less than then just in proportion as we come to understand the true nature of childhood. Nothing is really true unless it rest on deep foundations in human nature and needs, and all that does not square with that nature is false. Childhood and youth in their best impulses of development are not perverse, but point more infallibly than anything else to the constant pole of human destiny. *Das Ewig-Kindliche* is now taking its place beside, if not in some respects above, *das Ewig-Weibliche* as man's pillar of cloud by day and fire by night to lead him on. The modern student of psychogenesis sees almost a new continent of meaning in setting the child in the midst, and becoming as a child to enter the kingdom of heaven which is "of such." He holds a new brief for this hitherto submerged third of the human race. The misconceptions and distortions of children, body and soul, have been the reproach of not only rude but cultured ages. Here we must begin with a frank confession of past ignorance and sin, and bring forth fruits meet therefor. We are still exposed to the full force of the penalty which threatens those who offend these little ones. Let us pray that the good God may wink at times of past ignorance, but not forget that, now that recent studies of the human soul are revealing the Bible as the world's great text-book in psychology, we have no cloak for our sin. It is not a question of petty tinkering devices, but of a deep and radical change of plan, goal, and method now well developed and taught in institutions accessible to those earnest enough to undertake serious study. Plain though many principles are, others have yet to be determined, and there is also, let me repeat, a vast work of details before the completion of what is already begun.

" In his "Vedanta" Max Müller praises this system of Indic philosophy as standing distinctly above the Vedas or Hindu Bible, as something into which the *élite* speculative minds

penetrate, as a kind of meta-theological region wherein much might seem to those who glimpse it from beneath contradictory to the Vedic teaching, but he praises the harmony thus established between religion and philosophy as merely different stages of development of one and the same content, the inconsistencies between which are those inherent in the nature of growth itself. So I plead for a realm for these higher questions as the best safeguard against arrest and retrogression. It is a singular infirmity of religions that, much as they stimulate growth lower, they are prone to arrest it at a certain higher stage; so that the last moult of the soul as it seeks to cast off the cyst of dogma is prevented. Of all the many forms of the pervasive and insistent sense of finality of a finishing and finished education, this is the most dwarfing. The upper grades of our Sunday-school work too often confirm juvenile conceptions and sentiments, and prevent the development of mature manhood and womanhood in religion. This was the lack which the neo-Christian movement sought to meet, perhaps characteristically, by dispensing with all creeds. Neither the pulpit nor the college Y. M. C. A. quite meets the needs of the best academic minds, and Protestant Christendom today, in my judgment, needs nothing more than a kind of mission especially constituted for and addressed to them. During an experience of more than a score of years as a professor of philosophical subjects, where the deeper matters of belief are constantly touched, I have been profoundly impressed with the need of modern *ductores dubitantium*, or soul midwives, of a higher order than yet exists. Many seem to need not only a second but a series of regenerations like another sun risen on midnight. It sometimes almost seems from this standpoint as if Christianity itself, at least as now best formulated, does not quite suffice far as it overtops all other religions, but as though we must look forward to a kind of third dispensation of a new eternal gospel such as has hovered before the minds of not a few lofty souls since Christendom began. We must not set an arbitrary goal at any rate to the possibilities of human development. We must not forget that if the race is slowly advancing and each generation adding a little, this advancement can take place, not in the stages of complete maturity, still less after it, but only by prolonging

the later stages of adolescent evolution. Here only the future man that is to be slowly burgeons.¹

It is in this connection that our theological schools are most of all unsatisfactory. They close questions rather than open them to the methods of progress, which is always prone to be dialectic. It is notorious that institutions established to turn out those who are to save souls and teach so much that is good precisely fail to teach psychology or the doctrine of the soul, and that, too, in an age when it is a center of interest and study as never before, and in an age which the future historian of culture will designate as the psychological age of the world. No other field is so competent to regenerate these institutions, and create new centers of interest that will mobilize all old knowledge and repolarize the soul in conformity to the mind and will of Jesus, whose psychology is one of the great impending themes. Religion represents the most vital part of the soul, but by an iron law and because moments, men, and ages of the greatest vitality are rarest, nothing so tends to lapse to formalism, routine, and dogma. This stage of life is the highest and best as science now conceives it. Complete maturity already means decline from the highest human level. Hence, to guide the souls of youth is the very

¹ Adolf Harnack, at the Forty-ninth Annual Meeting of the German Philologists and Gymnasial Teachers in Basel, September, 1907, created what is described in the German pedagogical journals as real consternation, by proposing radical transformation of religious training in secondary education. For the higher gymnasial classes he would completely abolish the critical authoritative methods now in use and in their place establish courses based upon modern critical and historical methods. Only thus can this subject remain. Since, however, there are stages in the development of the pupils in which exclusively authoritative religious instruction has no place, and at the same time the modern critical methods would be premature, Harnack proposes for two years, in the middle of the course, to entirely omit this subject. For the four upper classes he would have a course in which the fourth or *unter secunda* should study the history of the religion of Israel and the Old Testament, the third the story of Jesus and primitive Christianity, the second should be introduced into Catholicism and early Protestantism, and the first class—*ober prima*—should study the essence of religion and Christianity with special reference to the vital problems of the present. In conformity with this, he would have also courses established at the university to prepare teachers for this work. The speaker insisted that students knew extremely little of the nature of other confessions, and that this was a great defect of culture that must be remedied. The conceptions which Protestant youth hold of Catholicism are almost inconceivably crude. The knowledge of church history must be relied upon to remedy this evil.

highest test of all preaching and teaching. Youth want inspiration rather than formulæ; vistas and hints rather than reasons. They are lifted by suggestion and imitation, and always gravitate from theology to philosophy and from philosophical to psychological problems and aspect of things.¹

¹ In England education has been mainly voluntary, and government and law makers have had till lately little to do with it. The pious founders and philanthropists who have given the time, work, money, and interest by which most has been done, are a unique feature of this land without a parallel in others. Thus, Raikes founded the Sunday-school in 1781 mainly to teach secular branches, and admitted all who would wash. A few paid trifling fees, and here on Sunday all the children of the poor, save those who could find entrance to the endowed charity schools, were taught the three r's and little else. They were essentially secular schools held on Sunday. Since the government took up the serious work of public education, however, about fifty years ago, Sunday-school teaching has become mainly religious, so that there is a sense which Fitch (*Educational Aims and Methods*, by Sir Joshua Fitch. Lecture 13, Macmillan, 1900) well recognizes in which the English Sunday-school has now become more or less superfluous, especially since the law of 1870 and its successors, which provides day schools for all who need elementary instruction, and requires even in the municipal schools Bible reading and religious instruction.

The English Sunday-school, therefore, has a new problem, and to solve it we must go back to the ideal of Sunday itself. It should certainly release from the week's routine and be sacred to family life in the home, for which the best Sunday-school ought to be a very poor substitute. If it encourages parents to evade their own responsibility, as Fitch well urges, it does harm, and just in proportion as parents do their duty, "we may be well content in the coming century to see the needs for Sunday-schools steadily diminish." Its advocates often mistake means for ends and vaunt great numbers and assume the Sunday-school is a good thing itself, and thus no doubt sometimes encourage "the negligent and ignorant parents who are simply glad to be rid of an encumbrance on Sunday." We cannot break too soon with the Puritan and the Jewish Sabbath, which gives a sense of unreality to religion and even life. If not, as George Herbert calls the Sabbath, "the fruit of this, the next world's bud," it ought to bring in the influence of the overthought and encourage larger and serious views and favor culture and poise.

The fact that the Sunday-school teacher is not paid and is not a professional pedagogue but a friend, a companion devoted to conversation, ought to increase his influence. The Sunday-school must not be solely religious nor, save in a very slight degree, theological. A part of the time might well be devoted to reading poems or stories with a moral meaning, and the teacher should be a sympathetic and effective reader. The children might describe books they have read; invent stories to fit pictures; have abundant suggestions from a good Sunday-school library as a moral safeguard. More than the day teacher, the Sunday teacher should be *in loco parentis*; should not enter upon his work in an amateurish spirit; should realize that his vocation is an art; interest himself in the best pedagogical literature and lives; never preach, but evoke interest and thought; shun all catechetical methods, most of all those that require simply yes or no for an answer, and next those that insist upon a form of words which always tend to become a substitute

While I hold the Bible to be the supreme book, I have no language emphatic enough to denounce the pedagogic infamy caused by the too common view of its uniform literal inspiration and inerrancy. The effects of teaching the historicity of such miracles as Jonah and the whale, the arrest of the sun, walking on the water, etc., is to make the fresh, eager, honest

for thought; and yet should train the memory and fill it with choice poetic and proverbial expressions from the Bible, which exalt the mind, touch the heart, preform moral decisions. I quite agree with Fitch that stereotyped questions and stereotyped answers leave no room for the play of intelligence or suggestion; they stand between and keep apart pupil and teacher, giving the crudest instructors an excuse for not making questions of their own; are faulty because they require the children to learn the answer without learning the question; and illustrate the one great pedagogic disease of iron law by which methods always tend to lapse to verbalism and routine. Moreover, they are too abstract, and although the Church of England specifically enjoins open instruction and examination in the catechism on Sunday afternoons, the practice has lapsed, because modern tendencies have everywhere left this defunct device far behind. Although catechisms may have their place, they are not for children. The very fact, too, that results are not tested by examinations, but done obscurely, makes personal influence more important.

Fitch urges teachers very strongly to inculcate only that which they believe themselves with all their hearts and to shun all concerning which they have private misgivings. He has no patience with the principles which assume that children should be asked to believe more than adults do, or "that it is good for them first to accept the traditional orthodoxy even though in after-life, when the critical faculty is fully awakened, their views will be corrected." Absolute candor, sincerity, teaching out of a full heart is necessary to prevent a sense of unreality and insincerity in the young. He doubts whether the convictions shared by the great body of religious adults are those taught to children as in the case of secular learning. With this view Phillips Brooks agreed and thought it calamitous to condemn each generation to fight over again the battle of that which preceded with the disadvantage of making this fight less strenuous, because belief was less intense to start with. "Never tell a child that he must believe what you do not believe." Make the Sunday-school, then, a device for bringing personal influence to bear; tell the things you have found most fruitful in your life; and maintain a wide margin of individual freedom from all rules and lessons.

This latter principle, although sound so far as it insists upon the chief gravamen being laid upon what the instructor most profoundly believes, needs one important modification; namely, very much especially of the narrative or historical part needs to be impressed upon the young as literally historical and objective, which maturer minds have come to regard as essentially literary. It is absurd to assume that one cannot and should not teach the tales of Homer or even Santa Claus, and do it with unction and success, while the child thinks it all to be simply history, while to the adult it has a larger, higher meaning.

Laurie (*Method and the Sunday-School Teacher*, in his *Teachers' Guild Addresses*. London, 1892, p. 69) says that "the qualification and preparation of a Sunday-school teacher can differ only in certain details from the preparation and qualification of teachers generally," viz., they must know well their subject matter

minds of children distrustful of the parents' sincerity and recalcitrant to their intellectual authority, suspicious of the church if not of religion itself, to pollute the sweet reasonableness that children bring to this subject, to burden and pervert the mind with casuistry and attempts at accommodation, to make instruction in these subjects not education but indoc-

and have an earnest desire to teach it and be interested in the minds of their pupils first, subjects second, and themselves not at all. There must be method for all who would pilot to the islands of the blessed, or both teacher and taught will be lost on a pathless ocean. The subtleties and delicacies of spiritual life make this the hardest kind of teaching. All clergymen should study principles and methods of education as part of their pastoral theology. "Soul is kindled only by soul." But nowhere are there such difficulties. First, the Sunday-school is voluntary; perhaps it should not be called a school, but should be as unlike it as possible and everything should be pleasant and attractive. Laurie would have no preparation of lessons, no tasks, no pressure, no competition, prizes, or gifts. It is a substitute for parental teaching and would not be necessary if parents taught the Lord's words diligently, when they sit, walk, arise, and lie down. Perhaps it should be a children's service with moral instruction. The teacher should instill; there should be brief talks on the life of Christ; the teacher and pupil should read the Bible together much and talk on fine passages. Dogma is not only useless but hurtful for the young, and theology easily gets in the way of religion. The child should recognize a causal spirit back of all things, should aspire for unity and sonship; and should be taught reverence and love, because these two underlie everything. "Do not ask children of even fourteen years of age to learn a catechism by heart; go over it, if you think it necessary, or the best part of it, and see if they understand it; get the substance of it from them in their own words. The learning by heart of the very words is a curious superstition and most certainly despiritualizes." The school must attempt only broad, useful truths; follow Christ's way and not that of the theologian; do not attempt to teach that duty is easy, avoid premature training in formulas which are very different from broad and useful truths of religion. "Preoccupation of the young mind with dogma has failed to make Christendom Christian; let us try another and better way."

In England education was long voluntary and largely under ecclesiastical control till the Act of 1870 authorized localities to establish public schools which should share the government grants. Thus arose a dual system. If in the new schools any kind of religious instruction is given, it must not be distinctive of any denomination and these teachers were exempt from every religious test. Local rate-aid was given only to schools wholly under public control. By the Balfour Act of 1902, aid from the government was dispensed to both classes of schools but by municipal councils. This was a temporary provision and satisfied neither the church nor the secularists, so that the Birrell Act of 1906, which went into operation, January, 1908, or something like it, was inevitable. Under it no sectarian teaching can be given in any state or rate-aid school. The Cowper-Temple religious teaching, which is essentially biblical only, is all that can be taught in the school. Thus, every British child can now learn something of the Bible. Still, the local authorities were authorized, if the demand was overwhelming to dispense with even this, and parents may withhold their children from it. This, however,

trination, and to implant alien constellations of ideas which act like foreign substances in the system. Our methods implant a morbid self-consciousness of the supernatural not felt about this element in Homer or the *Nibelungenlied* or poetry, because what should be taught as literature is inculcated as dogma. The Freud school have shown us the pathetic and

is exceptional. On the other hand, if the parents of a given number of children wish it, denominational teaching may be provided not more than two mornings a week for those desiring it, but not at public expense. Thus, in the transferred schools additional facilities for theological and sectarian training may be furnished and in rural districts the secular teacher may volunteer. While this scheme may be a step toward disestablishment or disendowment, it involves nothing that can be fairly called confiscation, as some extremists of the aggrieved minority claim. It only applies the broad principle that state subventions or local taxation cannot go to denominational teaching. Very partial analogies to such state assumption were seen after the war of 1870 when the German provincial universities, if they accepted imperial aid, must submit in some measure to imperial inspection and control; also in this country in the opportunity of colleges if they drop their sectarian characteristics to profit by the Carnegie Retiring pension, and again in the feebly endowed New England private academies, which have become public schools. It is too soon to learn whether under this system the Bible itself will become better known than heretofore. Claims both ways are made. One thing is certain, viz., that the dominant sentiment of the British people as expressed by Parliament favors teaching the Bible itself without theological implications. As compared with the systems of other lands this is a unique and significant departure. The Separation Law of 1905 e. g., in France, which went into effect December 10, 1906, was far more revolutionary, not only because it abrogated a concordat which had been in operation for one hundred and four years, but because it more completely secularized the new public education, making no provision for Bible teaching but substituting ethical and civic for religious education.

The battle over elementary education in England has led to the formation of a parents' league the purpose of which is to maintain the rights of the parent to determine the religious education of his children in the lower schools. It has now some 80,000 members and professes attachment to no political party or special religious school of thought.

In this country S. P. Delany (*Morality and the Public Schools*. Education, 1907-8, vol. 28, pp. 97-112) proposes that American school children be allowed, without detriment to their standing, to absent themselves half a day each week to attend religious instruction in their own churches. This arrangement might be made by legislation or by local agreement. It should be limited to children of certain age, say through the first two years of the high school, or it might be open to all. As children or their parents can choose among various subjects, why not arrange for this? The plan would place the responsibility of moral and religious training for children where it belongs—with their parents. Some churches could afford trained and even paid teachers. The pastor should take interest in it. The scheme is by no means new, but has been advocated on several occasions by clergymen of various denominations and by others. The scheme, it was said, would rid us of the pernicious idea that religion is for Sunday alone. It would give the churches something

even mentally degenerative influence we often entail upon childhood by the stork legend and our other evasions and hypocrisies about sex and reproduction when childish curiosity begins to center about the problem of the origin of life, and have detailed the results of repression which often become neurotic symptoms, all of which the simple truth told in time

more to do with education. It is claimed that no reform movement in education has enlisted the sympathy of so many religious bodies. Some have thought this would gradually do away with parochial schools. Pessimists have said that without such a scheme this country would be either Catholic or heathen. It certainly would not divide children into religious groups, nor interrupt the regular studies of the school, nor does it involve an abdication by the state of its function of education or a confession of incompetence. The plan needs to be supplemented to make provision for children who have no church connections and for whom it cannot be claimed that our national religion is Christianity. It would doubtless reform our Sunday-school system.

The fourth general convention of the Religious Educational Association at Rochester in February, 1907, shows wholesome growth. Its purpose is "to inspire the educational forces of our country with the religious ideal; and to keep before the public mind the ideals of religious education and the sense of its need and value." The three hundred and fifty delegates from the twenty-two states representing very divergent ideals, indulged in no controversy. They agreed in the exaltation of Christ, not doctrinally but as a vital fact of personal life. Philanthropy has taken the place of theology and the heart is making the theologian. Perhaps this Association often tends to be forensic, but it is nevertheless interesting and significant, but has so far little to show in the way of results.

It is to be regretted that the Y. M. C. A. has not made itself slightly more independent of its evangelical basis but remains so nearly on the old foundations. When it ceases to apply dogmatic tests its efficiency will greatly increase. L. E. Day (Religious Education. Association Seminar, 1906, vol. 15, pp. 17-31; 62-72) conceives religion as man's God-impelled effort to come into complete harmony with his environment. He thinks education has no meaning apart from religion. The former is conditioned by the continuity of society. C. W. Votaw, a good representative of this curriculum (Association Seminar, March, 1908), postulates a curriculum that shall rouse moral purpose, inform and train moral judgment, teach laws of physical and mental health, and secure their observation, inculcate self-respect and the dignity and worth of manhood, establish right habits of thought on social and civic problems, cultivate right feelings in all relations of life, develop and train the will to right motives and choices for individual and social welfare, to stimulate and direct social impulses, promote brotherliness in class groups, give a wider, practical, first-hand knowledge of present-day needs and opportunities, conduct work, awaken the religious nature.

J. V. Collins (Religious Education and the Sunday-school. Educational Review, March, 1909, vol. 37, pp. 271-283) finds only one solution of present conditions feasible, viz., "a two- or three-hour session on Sunday instead of an hour session as now, with changes in the administration of schools to correspond." This would involve a study period, smaller recitation rooms, more teachers and grades. Perhaps the teacher should be released from all church service. Sunday would be less

would avoid. In religious pedagogy the results are analogous but more diffuse. In Italy, Jordan and Labanca¹ have shown how the long struggle between clericalism and liberalism has made even the teaching and study of religious psychology impossible in all the state universities, despite many attempts to establish it, because everything bearing the name of religion suggests dogma to Italian youth, who are in a state of morbid revolt against all that smacks of ecclesiasticism. So for children our methods early alienate them from a topic naturally of supreme interest, because they are thus compelled to carry on a double housekeeping and swallow an undigested

dreary for the children. The plan could best be begun in communities where the religious tone is good.

The Sunday-school is isolated in time and place and because the Bible is thought so unique. Hence, its antiquated methods. E. P. St. John (*Criticism of Present Sunday-school Fads, Curriculum, and Grades, with Demonstration of Text-books*, Ped. Sem., Dec., 1909, vol. 16, pp. 519-522) weighs historical, geographic, photographic, dramatic, ecclesiastical methods suggested. He would begin religious education with nature worship or study, then mythology, then something like magic or man's control of the gods, then the idea of obedience instead of control, and lastly should come an aspirational type.

Dr. R. M. Hodge (*The Development of Social Consciousness in the Sunday-school*, Ped. Sem., Dec., 1909, vol. 16, pp. 523-529) seems to think that the individualistic standpoint in character building is almost entirely obsolete and that our very consciousness must be social; that in religion we simply add and include God in our democracy. He does not think that it is democratic that the superintendent should have so much executive and legislative power. He is now a czar who paroles his doulma. The real Sunday-school should be a faculty with a consciousness of its own. The class should vote on festivals, picnics, raising and use of money, should be organized, keep its records, have free discussion. All should begin with class consciousness. The individual code of honor should be a by-product of the class code. The Sunday-school building should be modeled on the best school buildings.

R. G. Clapp (*New Departures in Sunday-school Pedagogy*, Ped. Sem., Dec., 1909, vol. 16, pp. 530-536) describes the Kent System at New Haven of having one director for different Sunday-schools. This has been successful for three years. Teachers from half a dozen churches meet under one leadership, graded according to the age of the children taught. Kent and Coe are developing a new series of lessons of seventeen grades from ages four to twenty-one, with electives for adults, on the basis of child psychology. Non-Biblical sources are used. Children are often graded as they are in the day schools. At the age of thirteen the hero-worshiping instinct is given a rich pabulum in the biographies of great men, and this is continued during the fourteenth and fifteenth years and at sixteen, the age of most frequent conversions, it culminates in the life of Jesus.

¹Jordan, L. H., and Labanca, B. *A Study of Religion in the Italian Universities*. Lond., Froud, 1909, 324 p.

bonus of creed, or else join the ranks of the indifferent or hostile. The supernatural addresses the heart only and not the intellect; and every effort to force it upon the tender soul of youth against ingenuous doubt makes havoc with belief in the actual objectivity of all that is incredible to the naïve logic of childhood, taints the very sense of truth itself, represses rather than stimulates psychic growth and, instead of advancing unity of soul, cleaves the mind and heart in two and gives two standards, or else implants aversion to authority of parents and religious teachers, and hostility, perhaps too deep to be conscious at first, toward all the great verities of faith, contempt for litanies, and a complacent ignorance of the grandest of all the historic traditions of the race and its sacred documents. This evil is so vast and deep that its full purport is little seen by the pedagogic laity; and the church needs a great awakening from its long dogmatic slumbers if it is to save childhood and youth from the skepticism of which its own fondly cherished methods, and not science or philosophy, are the chief cause.

Here, too, the ideal, though it is a far-distant goal, is to repeat in wisely formulated ways the history of the race. Acting under this rubric we should learn how first to lay broad and deep the foundations on which religion rests, and which can be established only in early childhood in love and admiration of nature, and in the passion to be of service to others. All the differentiations even between the great ethnic religions should come a little later, and yet later those between Catholicism and Protestantism and Judaism, which spring from common psychological, as well as historic, roots; while last of all, because genetically latest, should come, if they are taught at all, denominational differences, all of which are slight and insignificant as compared with the above basal and generic teachings. For the young, as for pagans in the missionary field, all sectarian differences should be waived or concealed as long as possible, for they are at best only tiny twigs of a season's growth on the grand old tree of religion. If the child must be first pagan, make it a good pagan at that stage, for only thus and then will it be qualified to go on to higher things. Give supernaturalism its innings in this nascent season, but realize that all its forms are in their nature decadent,

like leaves, and must fall, but will leave the parent stem stronger and larger with each crop grown and shed. Religious growth means constant change, incessant new insights and beliefs ripening one after another, and constant substitutions of more for less perfect forms. Religion is the apex of humanistic culture, and needs eternal revision. To be eternally working over the formulæ of belief and the ritual of acts and conduct expressive of it is the very essence of spiritual growth, and dispensation must succeed dispensation in both the individual soul and the race; for the growth of really and truly religious ideas and ideals is the very best index and measure of progress, the impulse of which must always have the right of way over everything else in the expanding mind and heart, even if the ultimate goal to be attained remains beyond our ken "Like some far-off divine event toward which the whole creation moves."

The debt of education to Christianity was incalculable. Jesus was a great teacher, brought a new doctrine and rule of life, his parables are portative, pedagogic devices more plain and effective than Plato's myths. His disciples preached and taught. Origen called the holy spirit the divine pedagogue, and Tertullian regarded its still small voice as a new muse of truth. When, in 529 A.D., Justinian's famous edict closed the four great schools of classical philosophy, the church took possession of the world of culture, became the great patron of learning, wrought out a new philosophy, and established a score of great universities before the year 1400, while, earlier yet, Charlemagne and Alcuin had established the cloister cathedral, and other lower schools, where reading, writing, and the seven liberal arts were taught. For centuries liberty of teaching and learning was almost complete, and Protestants are prone to do scant justice to the educational foundations laid by the Catholic Church in its great formative period. When she began to grow suspicious of new learning, and the Renaissance and Reformation arose, we find Luther, Erasmus, Calvin, and Melancthon establishing schools and re-constructing courses, and nearly twoscore new universities were founded by this influence. It was again profoundly felt that education was the hope and method of Christianity, and that ignorance and superstition were the parents of sin; that

enlightenment was the best and surest way to bring man to true religion. Thus, almost down to our own time, the clergy have been the chief teachers, leaders, and inspirers of most of the best things done in education. This was true of Catholics, Lutherans, Puritans, Anglicans, and the rest. Very many secondary schools and still more colleges, in this country, owe their origin to religious belief. One of the first articles thus in the unwritten creed of Christendom has been Education. Even when the influence of the clergy began to decline in the higher academic grades of culture, they were in all Christian lands long its chief representatives to the masses, and established and directed elementary schools.

Now in all Christian lands, and especially among Protestants, the educational supremacy of the clergy is in a state of rapid decline. There has been a growing aversion to clerical influence, and secularization has long been the ideal in many places. The clergy should awake to the situation betimes. We would not minimize, but magnify, their efficacy in doing the Master's work among the poor, in slums, the influence of the pulpit against corporate greed, oppression, industrial malpractice, social evil, political corruption. The church not only prays, but works; but no one denies that its efficacy is vastly below its great traditions in the past. Meanwhile, with the development of secular education, there has grown in every land an increase in divorce in which this country leads, having more courts and cases than all the rest of the world, so that the proportion is fast approaching one tenth of all who marry. We lead in homicides, averaging ten thousand per year; less than five per cent are being caught and punished, as against over ninety per cent in Germany. The percentage of juvenile crime is rising, hoodlumism, general feralization of youth, child labor, the daily chronicle of crime and vice in the "yellow" press, and the many statistics of juvenile immorality reveal the gravity of the moral situation.

One thing the churches might do—and that is, while maintaining as long as they will their denominational differences of creed and forms of worship on Sunday, to formulate a programme of week-day work in education in the broadest sense of that word and open their splendid property to all who can use it aright, day and evening, leaving trinity, incarna-

tion, revelation, miracles, salvation in another world, and all other dogmas, however precious to believers, to be chiefly Lord's-day matters. Let the church waive all these distinctive doctrines during the week and seek ways and means of concerted effort, and reassert its ancient function of caring for and guiding the soul of youth and inspiring it to moral and personal enthusiasm, for pure, true living on this earth. It is by its own deterioration, from overinsistence upon doctrines and belief, its diminished interest in science, and in social reforms, that it has forfeited to the state its natural function of moral training, which the state is trying so bravely, but as yet with unsatisfactory results, to perform. This situation gives the church a remarkable new opportunity for reasserting its lost functions. Putting aside all claim of ecclesiastical authority and every theological shibboleth, and animated by simple, fervent love of man and by the crying moral needs of the present, can it not again set the world an example of supreme service in a crisis of dire need? To do this, it must abandon once and forever the old uncompromising spirit that demands all or nothing, and realize that absolute truth and virtue are rarely attainable on this earth, and understand profoundly that the second, third, or twentieth best is vastly better than nothing at all, and is very well worth doing. If the state will not tolerate theology or even the reading of the Bible, whence has come the world's greatest inspiration for righteousness and which is the chief text-book of psychology, then let it study the methods of introducing carefully selected ethical readers made by religious men from the most inspiring classical literature and perhaps the Bibles of other lands. If we are not ready for the German *simultan* schools by which Protestants and Catholics combine their pedagogic efforts on a few fundamentals, at least some Protestant sects might begin by increasing their efforts in the mission field, sharing the maintenance of expensive sectarian organizations there. They might, as some are doing, de-denominationalize each of their colleges, and seek by so doing to confirm, deepen, and broaden their common Christian character. The state, neither here nor in any land, will ever again tolerate any creed or confession. Its religion is patriotism, and the school is now its nursery, as the church was of piety. Science, too, will never assent to the

dogmatic method; but Christianity should not be expurgated from the art, religion, history, humanities, which it has done so much all these centuries to create, and without which even they cannot rightly be understood, and lacking some knowledge or feeling for which our children are not unlike deaf-mutes studying music. Better virtue without Christianity than Christianity without virtue, if such an antithesis ever become necessary so that we must choose between these two. Why should we not recognize the God of things as they are and, accepting the inevitable with what joy we can, according to the old Stoic maxim, try to rise to the opportunity of leading this great and impending movement for moral education, more pressing and promising than anything else in the history of the schools for the last century, and ourselves work out a programme, godless and even Bibleless if it must be in name, utilizing to the uttermost the sentiments of mutual help, social service, honor, patriotism, pagan though they be in origin, realizing that Christianity itself is not all ecclesiastical or theological, but that a purely secular week-day religion can and must be wrought out, and that the detailed methods for so doing are already within sight and reach. The institutional church has many a lesson we must heed.

CHAPTER V

MORAL EDUCATION

Philosophical basis—The ethical culture movement—International congress—Morals without religion in Japan and France—Epitome of the views of many writers—Need of moral education and of larger views on morals—Effects of feminism—Difference of sexes—Mother and child—Flogging, scolding, praise, fighting, revenge, stealing—Acquaintance with badness—Companions—Truancy—Honoring parents—Bravery—Justice—Moral topics in the curriculum—Industrial training—Reform schools—Physical education—Habits and morals—Sophistication of conscience—Honor—Mastery and specialization—Effects of the long vacation, of absence of families in summer—Child labor—Social workers and psychological experts for schools—Correlating agencies—Laziness as a root of immorality—Pupil self-government in the grades, high school and college—The pedagogy of juvenile crime and court—Youth our chief national resource.

THIS is considered the most vital and the most difficult of all the many vast problems now before the American people. It is not for educators alone, but for the nation to solve. It is the problem in which all the deep questions touching the perpetuity of our race and people culminate, and one in which a great awakening seems by every sign to impend. Already the literature in the field is enormous, the partial schemes many, and the interest almost daily broadening and deepening, although we do not as yet fully see all the dimensions of the problem.

The Background.—Education seeks to fashion and furnish an environment of facilitization for the development of all the best human possibilities up to their maximal maturity and power. From the standpoint of pragmatism (which is nothing but pedagogy asserting its sovereignty throughout the whole field of culture), one is almost tempted to say that the soul can no longer be regarded as unitary, but as a manifold or congeries of souls. At any rate, the term "Individuum"

is no longer applicable, as personality is made up of various elemental psyches, few in some, many in others, now compactly and now very loosely constellated, some of them persistently repressed and others forced and overstimulated like the various ids and determinants of somatic heredity. Traits, characters, attributes, faculties, marks, propensities, etc., are often so flimsily knit together in it that they can vary more or less independently of each other under the influence of training and environment, so that the cultivation of one may have little or no effect upon that of the others, and may even check their unfoldment. Thus, in the light of many careful recent researches, it seems somewhat doubtful whether there are studies that develop, or tests that can measure, general ability. Thus, practically at least, the soul may now be regarded as composite rather than monadic, and hence ideally there are as many educations as there are diversities in the make-up of human nature.

Again, certain elemental human traits suggest and perhaps go back to a few of the instinctive prehuman animal types which run parallel with morphological distinctions. Each animal group may represent some quality in great excess, the high selective value of which made possible the development and survival of a species, genus, or more probably a group; as, e. g., aggressiveness in the carnivora, timidity, deceit, or cunning in animals long preyed upon, etc. Each trait is thus a fulfilled possibility of evolution in some specific direction. Now, when, by the study also of the forms of degeneration in man or by that of markedly peculiar children, we find convergence or similarity of these three fields, investigated independently of each other, it would seem that we are really approaching a true alphabet or stoichiology of character or ethology in the sense that Stuart Mill first conceived it. Among the hundreds of thousands of animal forms, each having evolved its adaptations by stimuli and reductives, and by trial and error, into codes of food-getting, reproduction, group organization, etc., it is impossible not to believe that such very fundamental traits as sympathy, pride, desire of ownership, irascibility, the instinct of leadership, and many other moral and immoral traits are so persistent because they have been making through the geologic ages, and

have behind them a strong hereditary, phyletic momentum. Thus, when we deal with such impulses, the scruple of Plato, whether virtue can be taught, is inevitable. What ever religion may be able to do, moralism is not yet far advanced in the art of analyzing or synthetizing such paleo-psychic traits, or even in regulating what Bahnsen called their posodynism or dosage. Neither can it transmute the four temperaments of the old phrenologists, which modern studies of disposition are rehabilitating, or change the congenital eye-, ear-, or motor-mindedness or innate proclivity to certain moods, feelings, emotions, or sentiments. Concerning all this field, psychology is now realizing how little it knows or can do. It is because the soul has so many strains, old and new, braided, woven, or felted together in so many ways, some of which are integrated as with bonds of fate, while others are very liable to sejunction, that the systems of moral training can at best educate only parts of the soul in certain ways and for certain times; while teachers in this field, far more often than in others, realize the limitations that baffle all the resources of their craft. Loyalty and treachery, naïveté and innate *Blasiertheit*, bashfulness and effrontery, love and hate, self-repression and habitual abandon, chronic timidity and fearlessness, kindness and cruelty, spirituality and sensuality, temperance and passion, inclinations to solitude or society, caution and recklessness, conservatism and radicalism, squandering and miserliness, prudery and shamelessness, truthfulness and falsity, etc.; indeed, even such philosophical characters as are expressed by such terms as dogmatist, skeptic, stoic, idealist, sensualist, realist, positivist, and all the rest; even qualities so nondescript and *outré* that only "slanguage" can describe them—cad, mucker, slob, mope, yap, hobo, flunky, shrew, hag, poser, hustler, quitter, prig, guy, plunger, rubber; or animal names applied to human beings—mule, cat, hog, dove, peacock, goose, fly, fox, vixen, lion, eagle, jay, viper, clam, lobster, and countless more—the mere suggestion of all these is sufficient to show how populous with the possibilities of character, good and bad, the soul is, and how inveterately and fatefully it is dowered, and amidst what limitations therefore the work of moral nurture must be carried on, and how grave the danger that any and every leash may be slipped and

vicious, if not feral, instincts break away from all regulations and run riot.

Kant and the phrenologists, also Lotze, Bain, and now Perez, Paulhan, Feuillet, Ribot, Malapert, and Lang, in their studies of character, have all of them attempted little but classifications, some of them quite elaborate. But to-day individual psychology, although so much of it is devoted to exceptional or abnormal cases, is going back to nature, laying broader foundations, and bringing in the evolutionary perspective, until, through archæology and the remains of savage life, we are beginning to glimpse the still more remote and larger background of comparative psychology. Thus, we are realizing that the more basal human traits are the older and more animal in their origin, and that in general the more educable of man's qualities are those that are latest acquired. Thus, although man's is only one of the types of mind in the world, it rests back upon a wide biological basis common to all the types of mind. Some psychic traits are as clear-cut as physical functions like respiration, and probably as old and as unmodifiable, while other nascent ones are as amorphous and plastic as codes of etiquette. Thus, if we assume that the sphere of moral education covers precept, discipline, habituation, training, regimen, manners, deportment, etc., wide as this makes its sphere, it is yet small compared with the whole of man's psychic life. While religion and perhaps psychotherapy may often control some of the older and stronger energies of the soul than the best morals can reach, there stretch beyond both of them ranges of psychic life, the betterment of which is desirable and conceivable if the superman is ever to arrive, or if man is ever to approach perfection of body and soul in a perfect community in which all the best possibilities of both shall be fully realized and all the worst eliminated. Neither young nor old should lose the splendid ancient vision that has inspired so many of the prophets, saints, and apostles of righteousness, viz., of some ideal state, commonwealth, or millennium, city or kingdom of God, Utopia, etc., where most ethical characters and organizations are found. In the painful struggle for slight, gradual amelioration of present evils, we should keep some dream chamber in our many-mansioned soul, where we can occasionally retire and revel in the imag-

inations of perfection, and hearten ourselves by yielding to the fancy of all good wishes fulfilled and all high ideals realized.

The attitude of thoroughbred moralism of to-day, as culled from the utterances of some of its leading representatives, may be roughly characterized by phrases like the following: Why waste goodness and love on God who is a distant, perhaps a schematic and even imaginary being, and who, if He exists, has no need of our help, while our fellow men are in direst need of it? How much better mankind would be if all the service that had been lavished upon and the sacrifice offered to God had been turned to the benefit of our own species? To say that man has no rights as against God is treason to the race. Virtues are not means to some end beyond our ken, but ends in themselves. Complete human life is the supreme good. Hope of future rewards and fears of penalties in another life are unworthy motives which make goodness impure; they are selfishness for two worlds instead of for one. Pragmatism smalls down the divine and makes it the soul of this earth, or at least of the solar system, and this helps a little from vastation or dissipation of moral energy into the infinities. Man is not justified by faith, but by works, and perhaps *Gesinnungen*. Who cares whether the cosmic order itself is moral or not? It is enough that the social order be so. Not sacrifice and abnegation, but the fullest self-realization should be our aim. Let our leaders be the faithful Eckhardts of the people, quickening their conscience, and always alert for their betterment. It is a far cry to any of the ultimates or absolutes, whether conceived as metaphysical entities or as abstract perfection, first cause, truth, *summum bonum*, or as any or all products of theological or philosophical percolation; but to do our present duty should be our religion, and to render help is better than worship. Love diffused to all being is too tenuous and inefficient, and, indeed, it should not be extended too far on the present earth, but our moral endeavors should be concentrated to those we can really serve. As to the clergy and the church, they have had their opportunity, and failed; they have not saved modern society, and so let us turn to temporal, secular, and mundane agencies and see what moral power can be evolved from them! We derogate virtue if we assume that

it depends upon religion, and has no independent motivation of its own. Man's destiny is not conditioned upon a celestial transaction or on an historic tragedy, nor are any of the genuine merits vicarious; these fitted only a mythological stage, and are the baby talk of ethics that is outgrown by all who come to full maturity. If there ever was a God, even though He be now dead, He may have given man the light within, but it is there, at any rate, and is a sufficient guide, or else He did His work badly. Out of human nature as it is, all can be made that man needs. All that the church now requires can be based on an innate moral law not contingent upon any beliefs or theories. The codes of conduct sanctioned by the old religions are now quite inadequate to meet the complex needs of modern life, practical philanthropy, and reform. Doing right deeds is an organ of knowing true creeds. There must be not only moral endeavor but passion, and right living is the real religion of rational man. Some claim that with this spirit the church of the future, if it has a future, must be animated—that no one can become truly religious until he has accumulated considerable personal experience in moralizing himself and his environment. Even if Christianity itself was the original ethical-culture society, the movement has far outgrown it, so that it has mainly an antiquarian interest for the modern moralist, who must seek to better the world by purely natural, human means. A few speak of an ethical church with morality as its God, somewhat as Goethe said that science and art were his religion.

In 1893 Desjardins organized a "Society for Moral Action," a term its members preferred to "Ethical Culture." Their aim was personal moral improvement by doing "the present duty." Only by "acting the moral with all one's might" can intellectual doubts be cleared up, or an inner Christianity elaborated apart from historical and metaphysical dogmas. "An interior Christ" must be discovered or built up, or both. Vital faith is as incommunicable by words and as inexpressible in formulæ as character. Otherwise, one need only to be able to read in order to believe. Real skepticism is incompleteness of life, while true faith is realized only in conduct. By willing spiritually the right and good at every step with originality and individual initiative, by becoming our own

masters, lawgivers yet law-bound, by the daily practice of daily sacrifice, service, and purity, we generate in our inner experience all the essentials that religion characterizes as redemption, faith, grace, regeneration, etc., and realize that theology is only the attempt to describe the higher life of the soul in objective terms. Its phrases express the palpitating realities of the psychic life; but, like paper currency, the impressions become faded, they wear out, and need to be cashed in or resolved back to their specie basis.

In Germany, von Egedy¹ represents the culmination of an ethical-culture movement, which, as here and in England and France, has a very small but very select following (hardly more than from three thousand to five thousand in either land). It is not for children, much as all these societies concern themselves for their moral training, but is preëminently for the most mature, adult, cultivated, male mind. It is significant that the German movement flowers in men like the astronomer Furstner and von Egedy, who find the religious element indispensable. For the latter, Christianity is essentially an allegory that needs to be transmuted into life. Those who are most orthodox and to whom religious facts or principles are most extraneous, absolute, theological, know least of it, far less even than the sinner who knows, in his own life, the eternal powers, and feels deeply, although he may resist their truth. This is neo-Christianism, which insists that ethical aspirations and insights proceed from the depths of the soul, individual and social, just as they created Christianity out of themselves, and must now resorb and recast it again. Though the forms of both piety and conduct be changed in the processes of adjustment to modern times, and though there be genuine enlargement and aggressive development, the substance remains unchanged. The best of the neo-Christians seek to make and to keep themselves more acutely sensitive to moral distinctions, in and about them, than others. They dread acquiescence. They burn to know the good and to do the right. They would be moral saints, ethical revivalists, not slaves but the apostles and the evangelists of duty, and would make doing the good

¹ See Meyerhardt, M. W., *The Movement for Ethical Culture at Home and Abroad*. *American Journal of Religious Psychology and Education*, May, 1908, vol. 3, pp. 71-153.

the organ of knowing the truth. They are no Eremites but keenly feel the great evils in our public and private life, and will not grow complacent as they grow familiar with them; but they would reform the world by the slow methods of personal endeavor and example and do not expect revolution or social upheaval, much as they exhort great deeds by great men. Neither material nor scientific progress is secure unless moral improvement goes along with it, and because it does not and has not done so, they feel that the present situation is very precarious. They would, however, ameliorate the present condition by educating the young. But the material they work with is too refined and their methods precociously subjective for children, while very much that is essential to the growing mind is so transmuted that it seems omitted. Thus, their work of moral education lacks at once fervor and objectivity. Perhaps no men, not even the Stoic sages, have arisen to greater moral altitudes or have been more smitten with the sense of the transcendent beauty of the good life, or realize more completely that virtue is not a gift freely imparted but a prize to be won by long, unrelenting toil. Few, too, have succeeded for themselves in so far eliminating the supernatural, so that little sense of it is left in their own minds; but children need much of it and in crass form, as a provocative for self-knowledge. Religion is at root the most precious experience of the race—i. e., it is ethical experience transmitted and essentially inherited. Without this, moral teaching leaves the children cold, instructed but not impelled, ripe when they should be still in the green.

Anticlericalism and antiecclesiasticism have, in Germany, France, and England, fused to some extent with socialism and labor movements and entered politics; and many and bitter have been the denunciations of established religion by those who are sincerely devoted to the moral betterment of mankind. But more and more, even among leaders at first hostile, is growing the conviction that religion itself in some form is an inextinguishable element of all moral education for the young, and that its pedagogical uses cannot be entirely dispensed with.

In New York in 1907 the societies for ethical culture of that city, Chicago, St. Louis, and Philadelphia were federated

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as the American Ethical Union. They unanimously refused to be a religious organization, and yet a representative speaker declared that ethical religion is the necessary crown and completion of religious thought; and again, "Our success depends on whether we are religious." Again, "What social effort needs to-day is religion." Again, "The appeal of the moral ideal for social service is the appeal of religion." Dr. Adler closed with a fervid call, when the world is now rocking as in an earthquake, to a religious ministry of such ethical preaching as that of the prophet Isaiah, and bloodguiltiness is risked if we refuse this call. Wundt declares that the moral ideal belongs to the realm of the infinite.

The International Congress on Moral Education, held in London, September 25-29, 1908, brought together representatives of eighteen nations, thirteen universities, and official delegates from over a hundred educational organizations, who listened to some one hundred and twenty papers printed in its proceedings.¹ There was very great diversity of opinion. Indeed, Sadler,² its English leader, says "There was no general agreement." Along with intense sincerity there was also mutual respect, and the temper of controversy was restrained and deep-seated prejudices softened, so that some went away with the optimistic hope of an ultimate synthesis of apparently opposed teachings. Perhaps the most deep-seated divergences were on the question of the relations of moral to religious education, as to the value of systematic and direct *versus* indirect and incidental moral instruction, and whether the great English public schools fostered a sense of civic obligation. The profound English movement toward the secularization of education had aroused public interest to a high pitch and did much to make this, the eleventh International Congress held in London during the year, the most impressive of all for the press and the people. After listening to several able papers by eminent representatives of the Catholic, Anglican, and various independent churches, it must have been a solemn and im-

¹ Papers on moral education communicated to the First International Moral Education Congress in London. Edited by Gustav Spiller. London, David Nutt, 1908, 404 p.

² Sadler, M. E., The International Congress on Moral Education, *International Journal of Ethics*, 1908-9, vol. 19, pp. 158-72.

pressive moment when the venerable M. Buisson, representing France, presented the conclusion of that country that morals could now be effectively taught on a purely secular basis without any aid from or sanctions of religion, and recounted in brief and eloquent words the movement in this direction which took form in the organic law of 1886 that separated public education from ecclesiastical influence. Many Anglo-Saxons had not before fully realized what the religion of duty and of socialism meant, nor understood the magnitude or momentum of the movement by which the state is now slowly assuming the function of training for virtue, a task which the church had so long claimed as its own. Grave and solemn as this issue is becoming for the world to-day, the dominant sentiment in England, and to a great extent in this country, was well voiced by the aged Bishop of Hereford at the close of the debate on this subject, who said, "The religious teacher and the moral teacher have the same need, the same end, which is to build up conduct and character and good purpose in the child. . . . I would venture, as an old man, to suggest to the young teachers who are enthusiastic for moral teaching and afraid of religious teaching that the difference between the two might be expressed by the difference between the circle and the parabola. In the circle you confine yourself to what is within a limited boundary. In the parabola you have on one side this same limited boundary, but on the other it reaches out to the infinite. . . . Whether we are teaching religion or teaching morality, let us remember that in the teaching of these things the best of our teachers will rise till they touch the spheres." Buisson expresses the same sentiment. "Science does not exhaust the real, nor conscience the ideal." Religion is needed "to unite the good, beautiful, and true into one supreme and perfect unity, which religion designates as God."

In America the Religious Education Association was founded "to inspire the educational forces of our country with the religious ideal and the religious forces of our country with the educational ideal." Its representatives believe that education must be more spiritual and religion more intelligent to resist the commercializing, not to say vulgarizing, influences of American life. This association has over two thousand members, has held five conventions, at which several hundred

addresses were given, printed five volumes and many thousand pamphlets, and has held conferences and made investigations of religious conditions, and has had on the whole a most wholesome, if not as yet a very potent influence upon American education.

Japan.—Speaking of those systems that go furthest in dispensing with religion, Japan seems now to have in most respects the best organized, most detailed, and efficient of all systems of moral education, and no other nation makes this so cardinal. For seven centuries education was based on Confucius, whose teachings are essentially ethical, who ignored everything supernatural, had no use for gods or a future life, but made conduct basal. With the Meiji reformation in 1868 education was reconstructed and made more intellectual save in its moral aspect, but here no European models were found that were deemed worthy, and so the culture of virtue did not advance, and for twenty years there was growing confusion in theory and practice. Western theories of ethics were studied and found their partisans. Herbart's *Gesinnungs-Unterricht* was introduced in some quarters, while Buddhism and Christianity were both advocated, even by those who did not believe them to be final, as the best practical bases for morals. Then came the epoch-making edict of the Mikado in 1890, less than half a page of this volume in length, which is not only a remarkable document in itself, but was received almost as a revelation from on high. It demanded training in loyalty, reverence, patriotism, filial piety, moderation, courage, etc., according to the traditions of ancient times and the spirit of the constitution of the nation. The royal house has reigned for more than twenty-five hundred years in an unbroken line, and during all this time no pretender or usurper has ever even attempted to dispute its sway. The imperial destiny with this remarkable continuity is closely bound up with ancestor worship. Twice, alien civilizations have been adopted, but Buddhism and Christianity alike had to accommodate themselves to the spirit of the empire, while during the centuries of military shoguns the reverence for the imperial house never changed. This helps us to understand why this rescript was more than a new article in a constitution or than a charter or even a papal bull. It was almost a

sacred text, to be learned, preached on, because respect for the dynasty made such a promulgation from it regarded with a veneration little short of religious. In 1899, to clear up confusion and divergencies that were still unsettled, a committee was appointed to compile a moral text-book for all elementary schools, and in 1902 its work was finished. From a few of the chief points of this national system of moral education we may infer something as to its scope and power.¹ The adoration of the emperor gives to the system something not unlike a religious sanction, and yet it is entirely secular save so far as reverence to the emperor and ancestors, whose spirit is believed to be actually alive and active in their descendants, is religious. The present system, it must also be said, is made directly continuous with the old learning which a few centuries ago was kept alive chiefly in Buddhist temples and in the training of the Samurai, in military exercises, in hardship, obedience, perseverance, coolness, resourcefulness, managing affairs of home, etc., the latter training being not unlike that of an ideal English gentleman, and insisting chiefly on duties and but little on rights. Morals have always been deemed the chief end of education. For children from six to fourteen years of age, topics most necessary to the life of childhood with special reference to the degree of development, sex, etc., are those chiefly stressed. Theoretically, every child, whatever its class, enters the public school, and a special permit is required to be educated in a private school or at home. First comes instruction in respect to elders, parents, frugality, industry, modesty, fidelity, and then duties toward the state and society, with special emphasis on chastity and modesty for girls. These virtues are taken up singly and illustrated by tales of good deeds, by proverbs, short pieces to be read, pictures, etc. On entering school, children are taught to appreciate and love it, made to understand they come to be good men and women, that it is a pleasant place; the teacher must

¹ See *The Spirit of Japanese Education with Special Reference to Methods of Moral Instruction and Training in Different Grades of Schools*, by Baron Kikuchi, on *Moral Instruction and Training in Schools*. Edited by M. E. Sadler. London, Longmans, Green, 1908, vol. 2, pp. 319-45. Supplemented by Dr. Yoshida, *Notes on Methods of Moral Instruction in Japan*. Ibid., pp. 346-49. See also J. A. B. Scherer, *Young Japan*. Philadelphia, Lippincott, 1905, 328 p.

see to it that there is an air of warmth, kindness, and dignity. Pupils are drilled on rising, standing, walking, holding books, hanging clothes; are taken around the schoolroom and playground, taught all that they may and may not do, posture, order, punctuality, hard work, and play; duties to father, mother, brother, sister, home, the emperor, with proper honorifics; then lessons on the body, on liveliness, on manners, etiquette and deportment, which are minor morals, truth telling, the negative duty of not quarreling, lying, concealing, disturbing others, ownership, duties to living things, not to hurt other people's feelings, duties to teachers, food, cleanliness, regularity, modes of speaking, keeping promises, noticing faults, care of things, things lost, the flag, valor. In the next year comes instruction about reverence for ancestors, the duty of diligence, self-help, learning, perseverance, possession of mind, endurance, conscience, boastfulness, magnanimity, charity, kindness to servants, gratitude, envy, trust, public good, love of country, superstition, benevolence, military service, taxation, office holding and elections, observance of the laws, how to be a good Japanese, duties to society, self-respect, dignity, dress, labor, competition, wealth, credit, discipline, independence, progress, duties of a subject, respect of office. Much emphasis is laid on graduation, memorial, festival days and programmes, and the emperor's birthday is celebrated with special solemnities, including profound obeisance before his portrait, the reading of the rescript and its explanation. Suitable songs are prescribed.

In the middle school for boys, covering five years, from twelve to seventeen, and the girls' high school, from twelve to sixteen, morals are still based upon the rescript and the various syllabi, texts, etc., with plenty of maxims, examples of good deeds, with reference especially to ordinary and family matters and daily conduct. There is little system. Such topics as the following are impressed: reasons for observing school rules, authorities of the school, duties of the pupil, hygiene of exercise, eating, drinking, cleanliness, clothing, tenacity of purpose, mutual help, friendship, value of time, order, politeness, relations of brother and sister, sacrifice of self for the public good, responsibility, political and social virtues, duties of professions and various industries, the dangers of temptation. Later and

still more systematically much the same things are taught; for instance, the morality of health, intellect, feeling, will, obligations to all classes of people, to society, the state, the emperor, international relations, progress, obligations to nature, control of passions, development of common sense, toleration, modes of cultivating relations between ethical and natural laws, all with frequent general reviews. Examples of an extraordinary or violent character are carefully avoided, lest false applications be made. Abstruse ethics is also tabooed for it is undesirable for children to know that there are differences of theory. All that a girl is taught is based on the supposition that she will marry and be a mother. Manners are always important. If, says Kikuchi, we did not believe that an educational system could mould the character of a nation, everything would have to be remodeled. We hold the state can be saved and that our victories have been won by moral education. By it we have saved ourselves and prevented the melting away of the great ethical principles that have come down from the past and which are one of the solid foundation stones of morals. The late war, the spirit of recent legislation, the, in some respects, ideal relations of the members of a family, are products of moral education. How they have conserved and awakened the moral conscience of the nation! Two principles in general are followed in ethical text-books; first, to select an ideal character and study his whole life, and the other, to select a broad action of virtue, and cull illustrations of it from various sources. Story and precept must go together.¹

France.—Ever since the French schools were secularized and religious teaching forbidden in them, fearing an increase of immorality and realizing an ominous void created by the reform in the curriculum, the French, both by commissions and by private enterprise, have devised many courses of moral and civil instruction for each grade. These books, of which we

¹ Lafcadio Hearn gave seventy-two Japanese boys as a theme for a composition the topic, "What would you most like in the world?" Nine of them said, "To die for our sacred emperor." Perhaps self-assertion and self-denial at root do go together. (See also Bernard Bosanquet, *Ladies and Gentlemen*. Internat. Jour. of Ethics, 1900, vol. 10, pp. 317-329. See also his *Psychology of the Moral Self*. N. Y., Macmillan, 1904, 132 p. And Hilaré Belloc's *Moral Alphabet*, 1899. See also I. O. Nitobé, *Bushido, the Soul of Japan*. Philadelphia, Leeds & Biddle, 1900, 127 p.)

have a collection, are composed of maxims, moral principles, stories of heroism, and dramatic acts of virtue, not only from literature and history, but from current life. Feeling that conscience was not a sufficient guide, patriotism and the noble sentiment of honor were appealed to, and there were prizes, medals, and public testimonials for children who did noble acts. The love and pride of country and the instincts of the gentleman and lady were made into what has been called a new secular religion. Germany, on the other hand, realizing the immense difficulty of finding religious courses in which Jews, Catholics, and Lutherans could agree, a difficulty which has several times been attacked by the various religious bodies in this country, who have found it even harder to agree upon a uniform method than have the denominational mission boards of heathen lands, still adheres to the religious basis. Everywhere the methods of bringing public education under religious influence are becoming harder, because it is difficult to nucleate a consensus. In teaching morality, there is a broader and better basis of endeavor.

France has made the most heroic effort in the history of education to teach morals without the aid of religion. Especially ever since the epoch-making law of 1882, which required all elementary schools to teach morals and civics, and that besides Sunday, one day a week be set apart for such religious instruction as parents wished to provide (although all this must be done outside the school buildings), the whole vast problem of the moralization of the rising generation, independently of all ecclesiastical influences or religious sanctions, has been a point of cardinal interest for not only educators but for not a few statesmen, philosophers, and literary men, some of whom have made important new contributions. Few silent revolutions, we are told, have ever had greater significance. The movement proceeded "from the very depths of the national consciousness." In establishing the frontiers between school and church, which were very intricate, it was necessary to avoid the accusation of "godless schools," and so it was ordained that duties to God as they are revealed in conscience and reason as well as to the state, parents, self, etc., be taught. Respect for the God idea must be inculcated, however, with severe neutrality to the claims of different confessions, and

some of the most progressive leaders (Buisson, Steeg, Picaut) demanded that morals be taught in a religious spirit. They desired, says Harrold Johnson,¹ "to secularize religion and sanctify the secular." The movement was thus at first guided by the above triumvirate of Protestants of Huguenot lineage and sympathy. They held that "it is possible for a man, independently of creeds and churches, to live a moral life with all the depth and strength and force of the religious sentiment." They wished the consciences of the young to be "as open to religious as to secular thought." But these ideals could not be entirely realized in France. The French mind is severely logical and perhaps for that reason, in part at least, that country as a whole has missed the great pedagogic advantage of passing through the Protestant stage. Instead of a graded genetic processional (e. g., high church, Anglican, Lutheran, Evangelical, Unitarian, pantheism, or some other attenuated mature or post-mature stage of religion as intellectually interpreted) the French have provided themselves no halting place between Rome and reason, no halfway station on such doctrines as bibliolatry, or the substitution of an infallible book for an infallible church, or on such doctrines as justification by faith alone; but the alternative has been Catholicism or free thought, and the leaders have had to balance as best they could the dangers of priestly control on the one hand and of the recrudescence of anarchistic tendencies that made the French revolution on the other. Hence, various societies, such as the powerful League Française felt constrained to dispense with God and immortality as sanctions to duty. Now most teachers and most of the scores of little manuals rely for the ultimate appeal by which a good life is

¹ To whose admirable report on moral instruction and training in France, in Sadler's *Moral Instruction and Training in Schools* (London, Longmans, Green, 1908, vol. 2, p. 1-50), I am much indebted here, as well as to the four papers that follow in that report and a dozen of those of the International Moral Education Congress in 1908, edited by Gustav Spiller. London, David Nutt. See also G. Spiller, *Report on Moral Instruction and on Moral Training in the Schools of Austria, Belgium, the British Empire . . . the United States*. London, Watts, 1909, 362 p. With an admirable bibliography. See also *Moral Training in the Public Schools*, the California prize essays, by Charles E. Rugh and others. Boston, Ginn & Co., 1907, 203 p. See also many articles in the *International Journal of Ethics*.

to be justified on ideals of the innate dignity or divinity of man, perhaps on Kant's categorical imperative (although that is now in one camp interpreted as an external authority), on social solidarity, or the philosophy of positivism, or utilitarianism, or theories of conscience. Most of them would invoke deity or metaphysical concepts at least only as a last resort. Johnson well suggests that since the French have no Mikado whose edict could add potent external to intensive inner authority resting on the merits of the promulgation itself, there is now need of a declaration of the duties of man that shall have the same dominance as the "Declaration of Rights of Men" now exercises.

By the law of 1882 one hundred thousand teachers, whether Catholics or Protestants, strangely ignorant of the Bible, most of them with little deep personal moral experience or individual conviction, were suddenly given a kind of lay priesthood. For centuries the moral and religious appeal had been chiefly external and the national consciousness in these matters was singularly crude and naïve. The traditions and very atmosphere were more or less skeptical about the very existence of fundamental religious or ethical principles. Hence, it was not surprising that the first report on the results of the new moral education in the lower schools, drawn up by Lichtenberg in 1889, showed no very satisfactory results. It is thus unfortunate that it is from this report that a very general impression has gone forth that the scheme itself had been tried and found wanting. But it must be remembered that the legislation was itself not complete until 1886 and that several important enactments needful to carry out the plan to de-ecclesiasticize the higher grades of education came still later, and only in 1902 was moral culture given in secondary schools. Indeed, it is a prodigious work for a nation to seek to regenerate itself through its schools. Moreover, there were vast arrears through a long period of decline to be made up. French children and youth are still suffering acutely for past neglect. There had been a very great increase in juvenile crime after the Franco-Prussian War which showed little sign of being checked. As if by a malign or ironical fate, in 1880 France had passed a law facilitating the production and sale of alcohol, and in sixteen years its use had increased threefold

(as against Norway, which by a vigorous legislation has reduced it to about one third its former dimensions). The use of absinthe also increased about threefold in the nine years ending 1894. The French Government is dependent upon these sources for a part of its revenue. Native wines are very common in the school dinners provided at public cost and in those brought by the pupils. Again, art, literature, and even posters and postal cards that are not only suggestive, but sometimes almost pornographic, abound to a unique extent even in rural districts. The activities represented by Anthony Comstock and his societies have very little place in France. There the government fails to coöperate actively against either alcohol or obscenity.

Perhaps this is the place to mention, too, that like all great movements, this has had its fanatics and its crank literature. One master has evolved a very elaborate course of ten lessons on making the toilet in the morning, ten on table manners, ten on greetings, salutations, etc., through a long list. In one tale a cat, after destroying a nest of young birds, is overwhelmed with the pangs of remorse. There are photographs and moving pictures of good children giving sous to beggars and of bad ones abusing them, etc., etc., and essays in the high schools on suicide. Children conjugate the verbs obey, respect, etc., for the moral effects of repeating these words and phrases. One writer would reform business by making morals prominent in our commercial and industrial schools. Another member urges rightly enough, but with almost unintelligible abstractness, that *pédotechnie* must rest on paidology and goes on to elaborately reason out this obvious commonplace. One writer gives a formula for educating to originality and initiative by a new method which involves repression of imitation. One sees hitherto undreamed of sources of moral edification in arithmetic if number and measure are taught as the absolute in the Pythagorean sense. A socialist thinks parents do not coöperate enough with the schools in training to virtue because they do not want their children to be more moral than they themselves are, nor that they should be made too honest to succeed in business under present conditions. Everywhere the social sanctions seem overemphasized, perhaps as an instinctive safeguard against anarchy. One writer avers that the sole

duty of parents is to make children and that the state must then take them and do the rest. Another says it is attempting the impossible to really hold any faith and at the same time to be tolerant toward other creeds, and hence it is well that teachers of morals usually have, in fact, an animus against religion, especially Catholicism. One condemns the exclusiveness of university professors and would have them walk and talk with high-school pupils weekly. Another, in pleading for individual instruction, declares the present school system is as absurd as if patients in a hospital were grouped according to age and treated collectively in these groups.

Nevertheless, this great movement is steadily developing and the efficacy of the system was never so great nor its promise so bright as now. Democracy, of course, always demands universal suffrage and this necessitates universal education, and this again makes it imperative that moral teaching pervade the masses with a spirit of reasonableness, justice, and fraternity. There are those who still urge that "the worship of duty is the worship of God"; that His supreme revelation is in conscience; that to believe in the good, the beautiful, and the true utterly is to believe in God, while others hold that to instill a horror of all that is vile and an ardor for all that is noble is a different, although no less august, function than that of the church. To draw out of the depths of man's inner nature all that is sufficient for his moral development with no adventitious or extraneous support from anything supernatural or authoritative, has been a more and more inspiring ideal, which enthusiasts have claimed to be the loftiest and most unique of all the efforts of the human race since the modern period of culture began. Here we have perhaps the very apex of modernism, so that it is not surprising that the early moral lesson books were placed on the Index and those of Compayré were publicly burned. Still, the lay teaching of morals has become more impartial and has grown in public confidence and in favor with teachers, who find that it makes their vocation more influential and respected even in their own eyes. The destinies of the republic are felt to be more closely bound up with the schools, and this, despite the outcries of the clericals and the crudities and skepticism of the earlier years. Many of the French public teachers have not been friendly to religion

and have found it hard not to diffuse a skeptical spirit. "The deity that presides over these moral lessons," says Johnson, "is essentially the goddess of reason." He continues in substance that they instruct the intellect rather than appeal to the heart. Sentiment and feeling are too much ignored. Peptonized moral food is crammed. There is overmuch psittacism or parrot recitation, too much learning by heart, copying of maxims, mottoes hung and written everywhere. It is sometimes even "science *sans* conscience."

These tendencies, which are more or less dominant in all grades and topics of French education, are just now worst in the moral training of adolescents. The pupils of the Lycée are precociously introduced to ethical theory and write theses that lack vital touch with life. The secondary teacher teaches remotely from the desk and does not come into close touch with the life of his pupils, who nevertheless are under incessant supervision every hour of the day and worked with by censors, *répétiteurs* and *résumeurs*. In most Lycées some special ethical theory or system which seems best to the teacher is stressed. Again, after the first two years, instruction in morals ceases, giving place to preparation for the baccalaureate, and so at just the stage where it is most needed and should be most effective it is not given at all. Compositions on moral topics are common, although prizes for them, it is said, are sometimes won by the worst boys. But if the Lycées are still rather exclusive and bourgeois and, like secondary institutions generally are most conservative, best protected from and latest to respond to new movements, the normal colleges at St. Cloud and especially at Fontenay, where Picaut has done his remarkable work in the moral education of those who are to be teachers of teachers in the scores of training schools for primary instructors, are thoroughly democratic, and here moral instruction is better given and is more effective. Nevertheless, some three fourths of the children of France leave school before the legal age of thirteen and are so withdrawn from the influence of the moral training provided when they are approaching the most critical years of life. Could moral education be continued to the period of army service, very much would be accomplished. Probably, when all is said, the efficacy of such a system really depends more on what is done after,

rather than what is done before, twelve or thirteen. But although there are several kinds of continuation schools, courses, lectures for popular instruction, alumnial associations which provide teaching (sometimes conduct employment bureaus), the foundations of morality laid in the elementary schools are not sufficiently built upon.

Among the best lines of endeavor is the training of soldiers who are, of course, young men. This work is now well organized, with libraries and lectures designed to make the two years of compulsory army service a real continuation school advancing both knowledge and morality. The *morale* of the army is coming to be felt to be very dependent upon and in need of such kind of training. The primary teachers now work with splendid incentives, and nearly all of them wish to rise and become inspectors. Otherwise these teachers are mostly untraveled and are prone to narrowness. But they know their field, and are in close, almost parental, relations to their flock. Such teachers, good and bad, have often been lately represented in French novels. Each such school has a kind of solidarity and every child is eager for the diploma or leaving certificate, which often hangs in the poorest homes. There is a weekly report for the parents to sign and comment on if they will, and this gives the teacher a better hold on the pupil. Graphic curves are often kept, showing at a glance the progress of each pupil for each month in his whole career. Corporal punishment is usually forbidden, cleanliness is made a prominent virtue. The poor are helped to books, clothes, and even toys. There is a comprehensive school-insurance system, to which now nearly seven hundred thousand children belong; two sous a week are brought and this gives a sense of mutualism. In the flood of usually rather dull textbooks on moral and civic instruction, J. Payot's "*La Morale à l'École*," 1905, stands out as the best; all is based on social solidarity. It is called "the most important moral discovery of the nineteenth century." It is genetic and shows the evolutionary history of man from savagery, and this gives a sense of solidarity with the past. Here, too, may be mentioned as typical, E. Petit's "*Jean Lavenir*," a boy's autobiography showing what moral instruction is at present. There is now great activity in the production of moral courses and a tend-

ency away from the abstract to the concrete with perhaps excessive detail.

But despite all carping and defects, France to-day presents the magnificent spectacle of a great nation attempting to regenerate itself morally, as Germany sought to do, intellectually and nationally, after the Battle of Jena a century ago, through the schools. This movement is giving to the school, which had none before and did not feel the lack of it, a genuine soul. There is a fresh educational consciousness which is becoming an ever larger factor in realizing the national ideals. To a psychologist of religion the whole movement is profoundly religious and its anti-clerical cast makes it all the more earnest. Altogether it is a new creation which will be studied with intense interest. It seems almost as if the Divine were making a new revelation of Himself to-day in this movement. It implies the sublimest faith in human nature as capable of saving a nation, even when some of its own patriots were ready to weep over it as Christ wept over Jerusalem.

And yet, despite all this magnificent adult endeavor, a connoisseur of child nature feels that its needs are not yet met and that its heart is still left hungry. The child cannot lead a moral life with all the fervor and strength of the religious sentiment without religion. There are solemn chords in the soul not struck by set lessons in morals, by new readers illustrating the latest and best in current literature and painting, or by ideals of social collectivity and solidarity. There is little to appeal to the imagination. Fairy tales are generally severely tabooed. "Lights in the heaven of the soul have been put out." "There is no vent or escape into the ideal." All is too obvious or too often tainted with commonplace. If the good old morality of our fathers tends to "ankylose consciousness," the rationalistic flavor of the eighteenth century that clings to this teaching makes middle-school boys morally precocious. Conscience matures late and slowly and the method and spirit of schools are very hard to change, so that it must take generations rather than decades to make the culture of conscience as central as that of memory now is. But the youthful soul has a common treasure and spiritual patrimony in the form of latent race experience that makes it cry out for

breadth of life. For it indeed, "science does not exhaust the real nor conscience the ideal." Religion at its very lowest is the category of the ideal. It is the most intensely humanistic of all studies. Wise men, even those who reject it for themselves, urge with great earnestness that it develops the youthful imagination as nothing else ever can begin to do. It has a unique sphere in the soul and must be taught by a pedagogy of its own. It should bring in a most stimulating and heroic atmosphere. The child's individualistic experience is too narrow to afford of itself sufficient basis for moral education, although it must be both utilized and widened to the uttermost. Morals must be enforced by some sense of authority. It is not enough to merely reason with callow striplings, although French parents and teachers are more prone to rely chiefly on this. Moral science may be largely, but it cannot be wholly, experimental, at least for youth; nor is the Kantian imperative or utilitarianism or any other theory adequate, and the history of moral systems brings perplexity and inclines to casuistry. If religion be yielding to the higher, more spiritual impulses inherited from the past which prompt man to ever higher evolution, which perpetually inspire the inner counsels of perfection and of superior human vocation, the transcendental motivation so strong in adolescence must be utilized and a sense of corporate unity with family, school, city, state, mankind and the great cosmos, strengthen each other, while at the same time the duty of complete self-realization, of developing individuality to its uttermost must be impressed, and the consequent sense of dignity and self-respect—both these tendencies, the social and the individual—must be stimulated and given due temper by a sense of limitation and dependence which is religious in its very core—this is the ideal. To this end, the schoolboy or girl must not only get into touch with, and if possible visit every local charity, become acquainted with every reform and welfare endeavor and organization in his own environment, but must also profit by every source of personal moral and religious enthusiasm to which he is capable of responding.

Views of Other Writers.—For years I have read and kept tab by notes, now growing very bulky, on many score of books and articles on moral education, the rereading of which

now brings a confusion that will not be resolved because of the vast variety of standpoints and the great diversity of emphasis laid upon every aspect of this vast problem.

F. A. Manny cannot agree with Professor Palmer's opposition to definite moral instruction when he says that morality does not take its rise in knowledge. Moral education should begin, Palmer says, when one duty conflicts with another, and only so much teaching is necessary as will give the child respect for institutions and adjustment. Adler lays great stress on protected environment, the truth asserted by a superior mind that has traveled the same ground, dogmatic assertion preceding verification. He would have it include ability to change with the environment, and to train reformers. Griggs thinks the object of moral training is to substitute integrating apportioning of desire or the extension of sympathy and personality over widening areas of life. Dewey would develop membership of the individual in a larger whole, the person having not only power to change but to shape things. Griggs gives over five hundred titles on this subject. Manny praises studies of government. Colin Scott praises group work. B. Cronson (*Pupil Self-Government*, N. Y., Macmillan, 1907, 107 p.) finds the true value of the child not in his childhood but in his latent manhood. Gulick pleads for efficiency. Larned illustrates the great value of simplicity and directness, with citations from men and works. Cramer wants alternative courses of action kept open while adaptations are being made. This makes moral thinkers, and correlates responsibility with freedom. He also discusses schoolboy honor and the fraternity system. A prize was given to a Philadelphia clergyman who urges that right means according to the will of God, etc.

B. E. Brereton well expresses the French attitude in urging that the moment children begin to reflect, as they do at an early age, they want to know the reasons of conduct. Usually now, nurses and parents stifle free inquiry by authority and thus stunt the legitimate element of curiosity. The schools dampen these heart-searchings until the boy is in great danger of losing his healthy sense of wonder. Normally, he asks what life means, and what is its purpose that he must have standards, and that there may be something to live for. Thus, there must be thinking of a kind. We have not hitherto given children the credit for being able to do that which they can and long to do. Descartes thought that ideas become irresistible in proportion to their clearness. The Revolution, too, has helped to give France a problem which she must work out for herself, and neither she nor England can set fashions for the other. Again, we should not speak of the moral question, but of a series of moral questions. Paul Gaultier holds that without religion we could never have a veritable altruism; and yet, as M. A. Croisset declares in his "*La Crise Morale*," there are not symp-

toms or even a possibility of a return of the old traditional religion. But as Sorel says, the two equations, science and religion, are utterly irreducible, and those who read one out of the other are illogical. We must extract now the spirit of Christianity and disregard the latter. Science and religion must be given each its own independent place. Both must be cultivated and due balance maintained between them. Gaultier does not make morals a positive, autonomous and independent science quite apart from metaphysics and religion, but on the contrary, only insists that morality must be natural before it is made supernatural. Tufts thinks there should be general correlation between school training and that by which society is advanced. In early years indirect agencies may be relied upon. But the subject matter is not properly organized, especially in civics, history, and literature. The school lays too much stress on the intellect. De Garmo urges that moral ideas must be transformed into ideals. Man must be taught to supplement the altruism of service by the altruism of sight. The mother must be taught to fight dirt and disease for her children. W. S. Hall thinks that socially school hygiene can be made very much of in this regard. Making a living has moral possibilities that are not utilized to their full extent at present. Coöperative effort seems to be more appreciated just now than perfecting oneself, or even the sacrifice of altruism, and some stress is laid upon rapidity and perfection of workmanship. H. Johnson believes that mere morality would be cold, intellectual, and would not stir the instincts of wonder and reverence. Moral education ought to include among its tasks that of cultivating a higher religious attitude. A stupid man cannot be really virtuous, and it is rather doubtful whether a purely intellectual being could be so. It is not merely fulfilling our functions as a member of a social whole; it includes self-realization, some standards of reverence, ideas of comparative values. Foerster thinks that ethical education should make men independent of the impulses and excitations of the moment. Voyst said not only the school should teach moral practice, but the parents should know the faults of their children better and influence them more in their habits, food, dress, etc. Avebury thought moral education in England was uninteresting, narrow, appealed too much to the memory, and had little influence on character; said teaching should be indirect. Direct teaching must never be before ten, said Hoffmann, but should be very concrete, and the illustrations taken from the life of the child. Certain branches of instruction have more moral value than others, and Sedgwick emphasizes literature; Schneller, history; Rowe, manual training; Weyss, study of nature; Ravenhill, science; Lombroso advocated hypnotic suggestion in some cases, but the London Congress thought the time had not yet come for this. The sentiment was rather against a comprehensive system of rewards and punishments, and some condemn them all.

Clifford W. Barnes deprecates the principle that the school is to

make every pupil an effective economic unit and insists that the goal is the development of character and right conduct. It is no longer enough to teach the three R's, and the fact that we receive every year more than a million foreigners, many of them of the poorest and least educated class, magnifies the problem of moral education. It is not enough to teach obedience, punctuality, good manners, and school rules, nor to give intellectual instruction in rights and duties. In the case of exceptionally bad children the teacher may appeal to the class to know if they have done all they can to help him. This may even come in lieu or as a prelude of expulsion, or pupils may be made to feel responsible for teaching laggards who are liable to be dropped. We are now studying art, domestic science, manual training, hygiene, and every school branch, to see what moral value can be got out of it. In Europe both moral and religious instruction are most fearlessly taught. In Great Britain the first school hour is devoted to religious lessons, and many report the subject the most interesting one of the curriculum. This is a field where we must simply address ourselves courageously to problems that are so stupendous as to seem almost impossible. The new international organization to investigate and promote this work is the most hopeful thing in the field at present.

Alice H. Putnam thinks that the child can be disposed to much that is good by beginning very early to repress the individual in the interests of the social whole. The child is never out of the domain of morals and ethics. There must be close union between hearing, knowing, and doing, even in the interests of attention. Children must not be left so free to work out their own ideas that they cannot be subordinated. Only toward adolescence should habit be cultivated in James's sense of moral gymnastics, save on the daily stents of cleanliness, order, and other little duties. Reverence and respect is a prime basis of virtue, and the best guarantee of growth. Example never fails.

C. L. Payton says that sensibility is a word that should not lose caste. There must be greater freedom and sympathy between a teacher and pupil, which knowledge of the latter by the former greatly aids. The child's feelings are very changeable, often irrational, and their desires quickly cease, for they have little tenacity, and new interests always expel old ones. Monotony is so painful that even slight changes are often welcome. One of the strongest instincts of children is for activity. Hence comes much of their mischievousness, for they are always itching and bursting into life. Acquisitiveness, too, is strongly marked. The comparative and emulative tendency needs legitimate scope. Sociability is almost a passion. One of the keenest and most difficult feelings to use is the love of praise. Some are very easily discouraged; others are spoiled by indiscriminate commendation. The idolatry of mothers is always dangerous. Spencer says, "The test of being educated is: Can you do what you ought when you ought, and whether you want to do it or not?"

E. B. Bryan says in substance that many things immoral for adults have no moral significance in the child, that such standards as he develops come to him more by unconscious imitation and suggestion than by precept. It is not always theft for a child to appropriate what does not belong to him; neither is he a liar if he yields sometimes to his imagination, a trickster because he connives in many ways to attain his end, or immodest because indicating no shame. The time will come when all these things will have moral significance, and the pedagogic question is what can be done at the right time, without making the child hyperconscious of being either very good or very bad. Nowhere so much as in morals and in conduct do suggestion and imitation play such a rôle. Thus, chiefly, he learns language and no example of our conduct and truthfulness is lost upon him.

H. M. Thompson says that perhaps there is no point on which there is more agreement than that children, when they leave school, should be equipped to meet the moral requirements of life, and that instruction is not enough, and also that denominational religions and even theological conceptions are mainly ineffective and sometimes defeat the ends of virtue. Payot, a French inspector, in 1902 directed the removal from the walls of the schools of all pictures representing scenes of violence and ferocity. It is not enough to inculcate virtue as occasions arise, but something more systematic is needed. Codes of honor may be made very effective. The author outlines, although it must be admitted in a very general way, suggestions for three stages of moral instruction. He commends Charlotte Yonge's "Book of Golden Deeds" for the first, although he recommends that each teacher compile his own Book of Golden Deeds. He would have special attention given to teaching sympathy, mutual dependence, self-respect, respect for others, kindness to animals, and suggests Æsop and such stories as the "Bundle of Sticks," "Sir Philip Sidney," etc. He also suggests stories of the type of "Grace Darling" and "Father Damien." In the third stage instruction must be more complex. Here he protests most emphatically against basing ethics upon Scripture. The propensity of the theologists has always been to place the most incomprehensible doctrines in the forefront. The child is taught to submit himself to spiritual gods. F. J. Gould's work in persuading his countrymen to adopt more nontheological instruction in the schools is highly praised. The difficulties in this field in general are very great, but it is cowardice to say that because morality is of such great importance it cannot be taught. We must grapple with it in dead earnest.

Buisson says history shows in large type what we must decipher in very delicate lines in the psychology of the individual, though the will cannot be educated by itself according to Kant's "I ought, therefore I can," and it is also difficult to eliminate all the heteronomous elements from Schopenhauer's "will to live." Pure will needs the aid of all kinds of auxiliaries, especially in the young. Perhaps

will begin in the lower forms of life in irritability. The feeling of effort vanishes when habits are acquired and we are prone to grow listless and to abandon struggle. Strong wills are perhaps legitimate offspring of great clearness of understanding. Will both impels and vetoes or inhibits, so that the Stoic precepts, *sustine* and *abstine*, comprise its work. First comes spontaneous activity or the instinctive movements; next, conscious reflection; and then habitual activity, which is a synthesis of the two. How much effort are we capable of is a test question. Duty increases as we advance and does not diminish. We can never close accounts with conscience. The will ought to serve all noble causes. The will has many forms, directions, and stages. Self-control is one of the highest. It involves mastery, coördination, and subordination. Some say that when halting between two courses we must always choose the hardest. Reason, duty, truth, justice, are four expressions of will. We must accept the mighty burden of liberty or be eternal minors.

G. W. A. Luckey says the United States spend nearly two hundred million dollars annually upon public schools. Does it make the young better? It would seem that character is less fixed, but our age and ideals have changed. Instead of allegiance to higher powers, free men owe success or failure to their own acts. Character means the harmonious development of all the powers. Will evolves from involuntary aimless movements, then is guided by perceptions, until there is a desire to reproduce pleasurable and avoid painful states. Voluntary always depend upon former involuntary movements. Hence, surrounding conditions must be right. Health, intellect, sensibility, sympathy, are all needed. Life is transition. Other types will be necessary.

G. Spiller, in discussing the Moral Education Congress, contrasts the general conditions of life a hundred years ago, when most people lived in villages and were interested in local and rural affairs, with the present, when life is on an international plane. Add to this the progress of science, the new and larger ideas of religion which have made the old orthodoxy obsolete, the new human solidarity, change of modes of treating crime, etc., and we realize that not only the physical and intellectual, but also the moral situation has undergone a radical transformation. Responsibility for the education of children has been almost entirely taken over by the nation. Even the church is more or less superseded in this field. Thus, in a sense, there are two codes of ethics, one supplied by the nation and the other by the churches. More and more it is understood that intellectual education is no substitute or even guarantee for moral training, and that the state must control the latter as well as the former. The ethical concepts and motives that rule the world must rule the school in order to fit men and women to live in the large present and the yet larger future. Thus, "every lesson in the curriculum should be primarily an ethical lesson." There can be no doubt that church teaching is to vanish from the schools of

the world, and that practical training in conduct of some kind is to take its place. Deny it though some do, there is some difference between theological and civic or social ethics.

Sir E. Buske thinks there is great progress being made in this field at present. He thinks the power of moral judgment needs cultivating, and its scale must be extended upward indefinitely. Higher and higher acts and motives must be known. And tolerance must be taught for those mostly on a low moral plane. T. S. Morton points out the dangers of too much authority and too dominant personalities, even though they be wholesome. A feeble, quiet man may teach and guide a class by his intellect, and he may do it without appeal to higher authority. Perhaps this would best illustrate the French system, which is not made for export. J. Baumann has surveyed the general history of the development of the will, its plasticity, its laws, its relations to morals and character, the pathological side of the subject, and makes all center here. J. S. McKenzie says that we should produce the good citizen even before the good man, for the latter is involved in the former. There is an overlapping margin in diverging moral ideas, which we should attend to, for it often makes trouble, but our chief subject should bring out underlying unity. Although there are difficulties, they are inherently different from those in other educational topics, and we should hail these very difficulties with delight. Teachers do need special training unquestionably, but who will tell how to give them just this training? A recent writer calls attention to the frequency of drawings of the lowest and most savage and most inartistic style that are essentially obscene, to which children are now exposed, and would have energetic measures taken to prevent and to remove them. He even holds that the liberty of art in this respect should be restricted in the interests of childhood. He deplores the cynicism that sometimes appears even in decorations.

Claraz, deploring that we only learn how to live when life is almost past, urges that the study of the earlier life of criminals shows that in the great number of cases their moral perversion originated in the very earliest stages of adolescence. Society owes education to children as its most sacred obligation, just as it owes justice to adults. We should wake up about this obligation to abandoned children, and we need a very little moral regeneration merely as a matter of public safety. Punishment ought to excite regret, but this cannot be awakened in those who have no sense of right and wrong and of all social laws. One fifth of all court cases are orphans, and half are without father and about a quarter without a mother. Precocious perversity is very common, and prostitution in some form almost universal in this class. A. Meiklejohn says that the college is not fitted to teach the forms of living or practice the art of doing so, but to broaden and deepen interest into love, to bind up the riches of human experience and knowledge. It is not merely to prepare specifically to succeed in life, nor solely for effi-

efficiency, nor social service, valuable as these ends are. It should (a) teach the young how to use their leisure or play; (b) develop friendship; (c) give taste for work. How few are acquiring in college interest in the things that are most worth while! The art of life is a great art. Findlay, Paton, Golling, K. Koch, R. Deutsch, Kalb, Siebert, Trändorf, Wiget, Rönsch, Compayré, Harris, and indeed, nearly all the best writers upon educational subjects, have grappled with some phase of this mighty theme and shed light upon some part of it or contributed something to show its wider ranges and its all-transcending importance.

There is surely a moral revival that is felt not only in colleges and universities, but is connected with the Hague movement, the many altruistic organizations for defectives, dependents, delinquents, that underlies Hampton, Tuskegee, the George Junior Republic, the Juvenile Court, and all these efforts endeavoring to save society by impregnating it with higher ideals of moral life. The men in whom the country is deeply interested are ethical teachers, like Hughes and Roosevelt. The enthusiasm they inspire is largely moral, and there is great indication that this moral revival will continue till the great work has been completed. Pfordten thinks the pedagogue's basal precept should be to remain true to the deeper currents which have already set in and which dominate consciousness. This is being true to one's self, which takes precedence over reproducing the external world. If there are fundamental defects of character, people must conform to ideals of virtue even if they have to act or play a part at first, for that is what consciousness is for. Friedrich gives an interesting series of articles on the development of the moral and ethical judgment in the drama which is full of interesting pedagogic suggestions.

Challamel has written a volume of practical morality and current reading, and is one of the best representatives of the course in France, the twentieth anniversary of which has just been celebrated. The first general topic is the child in the family. The special sections are, the family in ancient times and now, filial love, recognition, the duty of respect, obedience, duties to grandparents, brothers and sisters, spirit of family unity, duty of masters and servants. Each topic is explained and has a recitation, often poetic, with a few maxims, extracts, on which there are questions and matter to be remembered. The second part, on the child in the school, sets forth the need of learning and the dangers of ignorance, diligence, exactness, duties to teachers, comrades, necessity of good example, emulation, pride, envy, jealousy, duties on leaving the school. Under country, there are lessons on society and its benefits, the greatness of France and national pride, love and devotion to the country, respect and obedience to its laws, duty of paying taxes, rendering military service, loyalty to the flag, duty of voting. Individual duties are to the body as the instrument of the soul, hygiene, exercise, dress, temperance, the nature of the soul and the intellect, lying

and truthfulness, will power and courage, patience, resignation, perseverance, originality, anger, pride, vanity, work, economy, avarice, order, prodigality, duties to animals. Under social duties come justice, charity, duty to our neighbors, war, respect for the liberty of others and their possessions, respect for the honor of others, calumny, mendacity, gossip, respect for the opinions of others and tolerance also for their rights. Here, too, come charity, benevolence, good will, generosity, clemency, devotion, fraternity, solidarity, amity; and lastly come religious duties, the belief in God's existence, eternity, religious culture in the form of hymns, etc. To love good is to love God, the honest man, examination of conscience. Supplementary lessons are upon politeness, conventionality, conversation, ceremonies, marriage, subscription, travel, etc.

✓ F. J. Gould has a series of three volumes of about two hundred pages each. The first is devoted to self-control and truthfulness, treating under the first head temperance, talking, patience, perseverance, excelsior, courage, self-reliance, prudence, order, and modesty; under the second head, truth in act and speech, keeping promises, careful eyes, ears, and tongues, knowledge, truth seeking, mastery, judgment, differences of opinion, proofs and tests, being and not seeming, and the reward. The second volume deals with kindness, work, and duty. Under the first head there are sections on the mother, the father, sisters, brothers, other people, kindness, clever people, the deaf, dumb, and blind, hospitals, lighthouses, fire brigades, animals; and under work and duty are chapters entitled, "Can," "Work," "Honor," "Duty," "Ability," "Social Service," "A Day in a Quarry." The third volume is devoted to the family, with chapters each on the Roman, Arab, Chinese, Spanish, Burmese, African family, the people of many other lands, the middle ages, fire, primitive man, what women have done, homes, furniture, beautiful things, the story of art, the Grail, science, Newton, customs, looking backward, Buddhists, the religion of India. Then there are stories of Confucius, Mohammed, Christian and Moor, Egypt, Assyrian, Babylonian, Romans, Greeks, Parsees, etc. These volumes are much less systematic and less calculated to be pedagogically impressive than are the French books devoted to the same aim. They are, however, on the whole, better than the Sheldon series.

✓ I. Kooistra¹ wrote in Dutch a concise treatise on moral education which reached its third edition when it was translated into German by E. Mueller. It is exceedingly comprehensive and practical. It first considers the subject from the personality of the teacher, who must have health, poise, firmness, equanimity, justice, and happiness. From the standpoint of the home and school he considers how they must work together, the present unsatisfactory relations, their cause and cure, the advantages of mutual visitations and school evenings, and the physician as a link between the home and

¹ Sittliche Erziehung. Leipzig, Wunderlich, 1899, 100 p.

school. Under working order he considers the best conditions for will, how a child can be helped, the feeling of responsibility, gardens, and pedagogical evenings, good customs, order, courtesy, systems of advancement of each. Under poetry in child life he treats of happiness as a means of education, the gifts that lead to it and its conditions; the interests of teachers and brothers, sisters and relatives; household order; prizing the good of others; care for servants; class spirit; the child's relation to nature; the culture of gratitude; should the child feel this sentiment toward its parents; disillusion; selecting a happy humor; children who are quick-tempered or spoiled; the right to be buoyant and happy; child visits to theater, concert, balls; the necessity of preserving the childlike in the child; birthdays; charity; St. Nicholas and stork question. In treating the school as a servant of moral education, he describes the tedious and the good teacher; class instruction; rivalry; place taking and sense of one's own worth and of the value of knowledge; the fact of education and thought. Under suggestion he treats of what the teacher can do by his own external appearance and what he does by example; what he says; how far it is well and when to invade the natural freedom of the child; kind of talking about good and bad; dress; how children are bound to be what we think them to be; the indifferent child; falling under suspicion; command and prohibition; the passionate child; requests; how to make good seem tedious or attractive; modesty; a lapse into old, bad ways; how children have a good memory for good deeds; he would hinder the bad by supervision and discuss his temptation; promises; keeping of secrets; friendships; the pedagogical errors of dispersing, threatening, punishing, and rewarding. Under penalties he treats of judicial and pedagogic punishment and describes when the latter should be applied, when it does most good and is a natural penalty, and whether there should be punishment for carelessness. He thinks it should not be inflicted immediately; should not be too strict in instruction; describes when he would send from the class; how he would treat impudence; face making; how he would prepare the child for punishment; when he would place him in the corner; when it should be physical; discusses the dark room; calling before the class; the considerations afterwards; the value and place of regret and resolution; punishing several together. Under honor he treats of love of truth; lies of necessity; failures in lessons and excuses; the discussion of falsehoods; lies from fear; how mistrust is a penalty; how to treat theft; and finally, in the education of girls, he discusses the difference between the sexes; the girls' weakness or strength of body and mind; traditional ideals; immodesty and diffidence; politics; the desire to draw attention to herself; self-renunciation and sacrifice; the aim of life; and the training for wifehood and motherhood.

Mr. M. Fairchild, of Baltimore, shows two or three score of stereopticon pictures per lecture of actual scenes he has photographed

as he could catch them from boy life, illustrating moral principles in action. During ten years he has gathered data for three or four lectures and hopes to have a dozen or so, and also that the work may be carried on later by others. This method is concrete and specific and is highly commended by teachers, parents, and boys who have seen it. It deals largely with school life and the lectures are intended primarily for schools. The idea is to show ethical principles in action. This suggests whether the moving pictures might not be more effectively used here. Typical dramas of boy and girl life might be carefully rehearsed and then acted out before the camera; and thus, it would seem, they might be made more animated, typical, and effective. The possibilities of moral education in the innumerable nickelodeon shows mainly supported by children and young people are incalculable.¹

The Brownlee System of Toledo, Ohio, for moral education assumes that thoughts are things, that the mind like the body needs food, and so the thought power is put to work somewhat as follows: a word is chosen, one for each month: kindness, cleanliness, obedience, self-control, courtesy, and cheerfulness, work, honor, honesty, clean language, manners. The topics may be subdivided, giving a week each. The word is beautifully lettered large on the blackboard as well as on a banner at the entrance. Maxims illustrating it are memorized; their ideas are brought out. And then, having sensed their thought power, they are organized in a school city, each grade a ward, but only the fifth to the eighth eligible to office. The mayor must be from the graduating class and offices are held for five months. The maxim of the nominating convention is: "Say all the good you can of your own candidate and not a word against the opponent." Once a month there are citizens' meetings. The insistence upon the word seems suggested by certain mind curists who hang up words like "Health," "There is no disease," and fixate it as the people of Israel did the brazen serpent of Moses and became well.

In the volumes of the *Revue de l'Hypnotisme*, now approaching its twenty-fifth year, are many cases of boys and girls reported to have been cured of truancy, lying, masturbation, and various other juvenile faults by being hypnotized, and when in that state given authoritative commands or moral sermonettes by way of suggesting to them to cease the indulgence of the evil propensity in question. This being done while they are still in the hypnotic state, they are taken to a neighboring room to sleep awhile under the influence of the injunction to betterment. They sometimes come repeatedly at stated intervals, and in many cases are reported cured or improved. I have seen the process and been assured by Dr. Bérillon that the method is very effective. His institution, however, is not

¹See Walter H. Page, Teaching Morals by Photographs. *World's Work*, March, 1910, pp. 12715-12725.

connected with the school system or the city government, but is frequently resorted to by anxious parents with wayward children. I know of no such systematic application of this method of moral orthopedics elsewhere, and there is much skepticism as to the efficiency claimed for it. Yet, that the far more subtle and laborious method of psycho-analysis, which the Freud school apply, not in the hypnagogic or hypnoid, but merely in the tranquil state, has often caused great moral improvement, seems undoubted, especially in those with neurotic traits. Possibly there may develop in this field in the future some effective aid to virtue.

A. von Overbeck ¹ has developed with great clearness and fullness the present necessity of expanding all preventive functions for youth who are exposed to crime, and thinks that to treat the subject adequately requires a revision of the entire social structure. He almost seems to abolish the distinction between those who attempt and those who accomplish crime, and would have both punished alike, if not, indeed, participants and accessories. Criminal law, he regards, both in its provision and in its execution, as an inexpressibly clumsy instrument which does immense harm.

H. S. Gray ² brings sanity into this field, showing that while cigarettes are perhaps the least harmful form of tobacco in themselves, in another sense they are the most harmful. Some think boys that smoke cigarettes are like wormy apples that fall from the tree before they are ripe. They may indulge in the habit to a great excess until it becomes a dope. Perhaps it leads to other forms of narcotics, but it is singular that so little is really known scientifically upon the subject. We have, of course, statistics showing that very few high-grade pupils smoke, that it is bad for athletes and often goes, whether as cause or effect is uncertain, with mental and moral defect.

G. H. Palmer ³ does not believe in special moral education in schools, but thinks that the school itself and its studies should be an ethical instrument, not only a place of learning but a social whole. Although himself an eminent academic authority on theoretical ethics, he gives no sign of acquaintance with any other of the many problems of the pedagogy of ethics now under discussion. The only new thought in this exquisitely phrased monograph is a plea for a noble kind of imitation and influence. Personal influence is not increased by intimacy but rather "familiarity breeds contempt." The young, brought into close association with their elders, are prone to fix on petty points and especially errors and miss the larger lines of character. Hence, "distance is a help in inducing enchant-

¹ Die Erscheinungsformen des Verbrechens im Lichte der modernen Strafrechtslehre. Leipzig, Engelmann, 1909, 60 p.

² The Boy and the Cigarette Habit. Education, Jan., 1909, vol. 29, pp. 294-315.

³ Ethical and Moral Instruction in Schools. Boston, Houghton, Mifflin Co., 1909, 56 p.

ment, and nothing is so destructive of high influence as a slap-on-the-back acquaintance. One who is to help us much must be above us. A teacher should carefully respect his own dignity," etc. We must not cheapen ourselves, and an occasional weighty word is better than frequent talks. The teacher ought to be the sort of person the pupil would like to be. We should accept our pupils' admiration and deserve it. If they long above all things to be the kind of person we are, we are having the right influence upon them; and if pupils are supplied with teachers who, without swerving from their proper aim of imparting knowledge, will supply them with intellectual, social, and personal righteousness, nothing more is needed.

Josiah Royce¹ conceives duty in terms of loyalty which, properly defined, he thinks to constitute the whole moral law and to be the cause of all virtues. His loyalty, however, is to causes and ideas rather than to persons, so that he does scant justice to the potency of fealty to leaders and heroes. Everything culminates in "loyalty to loyalty." Each must as his supreme task interpret and define the eternal in his life. This devotion to a carefully chosen and super-provincial cause potentializes life. "I could not love thee, dear, so much, loved I not 'virtue' more." Its motivation is thus anti- or rather super-pragmatic. Hence, valuable as this volume is as a somewhat popular statement of the author's philosophy, it contains little that is of great psychological value, and hardly a reference to the passion of loyalty in childhood to persons.

This must suffice to illustrate the welter of opinion upon the subject, the diversity of viewpoints, the differences of stress, and our remoteness from any general consensus, and especially the illimitable vastness of this field. Meanwhile, many writers have attempted to give their theories concrete form in moral text-books for the young. In these there is more agreement, and they are a great advance upon the moral pabulum prepared for children in the be-good literature of a generation ago, vastly more definite and less sentimental, while the hortatory element has faded and left hardly a trace. They differ, too, almost *toto calo* from the academic text-books in moral science which are mostly theoretical and speculative, discussing such abstract problems as freedom of the will, the nature of oughtness, the sanctions of goodness, etc. Of remorse or even regret for errors, we nowadays hear very little, and the bad boy rarely meets prompt and condign punishment, as in the older literature. There is vastly less about

¹ *Philosophy of Loyalty*. N. Y., Macmillan, 1908, 409 p.

sins or even faults, and chief emphasis is put upon positive good conduct, as if the effort was to protect the young from all knowledge of what is bad.

Need and Status.—Is the need for moral education really as great as many frantic writers and declaimers represent? The percentage of juvenile crime is increasing in most civilized communities and the average age of first commitments is declining. But city life makes many acts, particularly petty theft, criminal which in the country are only larks. What vital country boy has not stolen or would not have sometime, perhaps many times, been arrested if a policeman had caught him at all the worst things he ever did? Who has not lied, broken the Sabbath, used bad language, done obscene acts? What a large proportion of the legion of faults, for which Közle enumerates some nine hundred German words for use in scolding, which parents and teachers condemn, are really only offenses against their convenience and not due to real depravity, such as noisiness, manifestations of animal spirits and disobedience of commands which a larger wisdom would never have imposed. Waywardness may be only the first outcrop of a strong will. The scores of gangs in every large city, despite their evils, do not very often become criminally lawless though their spirit may be so. The fact is, most adult standards of virtue for children are often so unnatural as to be impossible. Again, exceptional children very often experience the tragedy of being misunderstood when the applications of the very first principles of child study would have saved them. With the herding of children in platoons and the lockstep methods of schools, with the decay of the parental instinct, the native-born American has lost touch with childhood as never in the history of the world, so that children were never quite so orphaned as here. Everywhere children tend to be blamed about inversely as their nature and needs are known, and where they go wrong in tender years, are they not more often sinned against than sinning? Alas! we have no national Pittsburg Survey, no adequate statistics or no psycho-analyses that go to the heart of the matter and give us the clear, cold, indubitable answers to these queries. Scientific data concerning even sex aberrations, the worst of moral dangers which children are exposed to, are not sufficiently extensive or ade-

quate. Where proper vents, long circuits and alteratives are supplied for the animal propensities, it is amazing to see how even viciousness rights itself. Violations of adult prohibitions under existing conditions are no test of the innate moral nature of the young, who need not so much moral instruction as opportunity, not so much precept as incentive and example, and it is parents and teachers that first need reformation. It is our moral codes and ideals for the young that require reconstruction. We have yet to learn that conscience in the primary grades is for the most part an artifact and that a sense of duty easily becomes a form of precocity in girls in short skirts and in boys in knickerbockers. The moral sense in its rudimentary stage is very often dwarfed by being overworked and is often assumed before it begins to bud, and this always, and in every field, brings later apathy, if not repugnance. A few sample returns will shed light upon the actual moral status of average children and youth.

L. W. Kline¹ gathered returns from 2,384 children from which he infers that judgments of right and justice among children from eight to eighteen are more due to emotional than to mental processes. Children of this age are, he thinks, more altruistic than selfish, country children more so than city children, and finds girls more sympathetic than boys and more easily prejudiced. An unfortunate girl in a story was, as if to compensate for her misfortune, endowed with virtues which were not suggested. The punishments were perhaps not only excessive but cruel. In some homes, evidently where moralizing has been overdone, there was a feverish desire to express ethical views which had interfered with the healthfulness of the moral tone. Boys were more original than girls and country than city children.

F. W. Osborn² asked forty-five boys and girls between nine and eleven what a boy or girl must do to be good and bad. The same questions were asked of a similar class of children in the public schools. The result showed that the moral ideas of children are very concrete. The good boy minds mother, teacher, does not quarrel, lie, whisper, behaves in chapel, etc. More than half of both sexes emphasized the importance of obedience. Truthfulness came next, but at a great distance. Does this mean that the former habit has been best established? Girls are more impressed with the

¹ A Study in Juvenile Ethics. *Ped. Sem.*, June, 1903, vol. 10, pp. 239-66.

² The Ethical Contents of Children's Minds. *Educational Review*, 1894, vol. 8, pp. 143-46.

importance of truthfulness than boys. Ethical ideas evidently arise through self-activity. They are first egoistic, but pass rapidly to altruism. Children of the rich do not always possess the highest moral standards.

M. L. Roussel¹ studied 3,643 answers, most of them from children between eight and thirteen years of age, to the question "What is the most beautiful act you ever saw done?" Of these, 128 had never seen a beautiful act; 498 were unclassifiable, such as having seen a house built, a man play billiards with his feet, or a present. Acts of devotion, so-called, 1,535. Of these, 732 had seen people rescued from drowning; 199 had seen rescues from fire; 353 had seen runaway horses stopped; 31 had seen a mad dog killed. Under acts of charity there were 608 mentioned; acts of friendly aid and solidarity, 535; restoring lost objects to their owners, 139; help to animals, 49; adoption of poor children, 39; separating fighters, 32; and there were many miscellaneous deeds. Often the sex was not mentioned, but 714 replies, at least, were by girls, and 1,616 by boys. Acts of charity were mentioned nearly three times as often by girls, and those of general assistance about twice as often. For young children beautiful and heroic acts are often not distinguished, although perhaps the term "beautiful" is more often used to designate acts of devotion rather than of charity. Rescue from drowning is a classic example, and 37 per cent of such rescues reported were by children, although they saved but few people from fire and performed few deeds of charity. Nearly half of the total number reporting had seen the acts they described, and the rest were reported from books and other sources. The latter sometimes lack sincerity, as, for instance, where a boy saves an enemy from drowning and says: "Now I am avenged!" Theatrical sentiments often appear, and sometimes the dishonesty appears in that imaginary deeds are seen, or those read of are described as if the writer was the hero. There is some lack of sincerity from the opposite cause, namely, a certain repugnance to tell their own intimate thoughts and feelings. Sometimes John or Mary or other model children are described in the first person. The questions answered as an exercise in composition are answered with a view to produce a favorable literary opinion. Reports that are plainly personal and sincere, which are not so very numerous, are easy to detect. Unfortunately some of the acts cited as beautiful are neither natural nor really good, and the question is inevitable whether some of these good-book deeds really aid in the moral education of the young. Moreover, they eclipse the homely and trivial events of daily life. Almost the only act which stands for patriotism in the mind of the child is dying on the field of battle and thus winning the fame and glory of a hero. Whether children really can love their country is

¹ Rapport sur la plus belle action. Bulletin de la Société Libre pour l'Étude Psychologique de l'Enfant. Janvier, 1903, pp. 245-52.

a question difficult to answer, and is made still more so by the returns upon this subject. Whether the French text-books on moral and civic training, which so often represent children as prodigies of virtue, and which is always triumphantly rewarded, sometimes in a melodramatic way, where the little hero goes to death rejoicing, where the rich man who gives alms is always praised, are wholly good is a question; whether it is sufficient is doubtful.

Dr. M. Carrara¹ describes a large number of boys in the university town of Cagliari from ten to fourteen who are restless, lazy, and unoccupied and infest the streets of this university town in Italy. The example of their comrades often affords incitements to crime. But very careful studies of fifty of these boys with regard to their physical and psychic traits fail to show many of Lombroso's marks of criminality. Indeed, the true criminal type of Lombroso is extremely rare, although there are often degenerative anomalies. True, there have been many crimes, mostly petty, and many commitments, mostly brief, and occasionally a boy has been committed perhaps a dozen times. On the least pretext they pass indifferently from one profession to another in a way that shows that the trouble is not in the conditions of work but in the nature of the children and their insurmountable sloth. Their speculations are bits of coal, wood, eggs, and trifles. Not a few of them cut loose from home and sleep where they can. It may be they sell matches or shoe-strings. The older of these boys are very often guilty of sexual crimes. There is some precocity, disease, hetero- and homo-sexualism. Almost all of the boys maintain their religious practices. They are illiterate and defy the law of compulsory school attendance. But as a class they are criminals neither by habit nor occasion, nor even criminaloid. Whenever they find the right openings for their activity their criminal tendencies speedily disappear, so that what seems the threatening army of coming criminals really never does much harm.

F. C. Sharp² asked one hundred and forty students in the University of Wisconsin, some of whom were newcomers from the farm for an elementary fourteen weeks' course, and the rest upper class men and women in the Arts Department, a number of casuistic questions, each set in detailed circumstances, of which the following is an epitome of samples: Might a poor man steal from a rich one if only thus could he save the life of a starving child? Should children be told of Santa Claus? May a youth who promised his father to give up the law, which he loved, and enter the latter's business, which he hated, revert to his own desires after the father's death, if the business

¹ Les Petits Vagabonds de Cagliari. *Revue de l'Hypnotisme*, 1902, vol. 16, pp. 135-39.

² A Study of the Influence of Custom on the Moral Judgment. University of Wisconsin, Madison, 1908, 144 p.

grew bad and seemed insupportable? Should a besieged camp give up an innocent man to be tortured by Indians, who would otherwise overpower and kill all in the camp? May a doctor poison a hopeless cancer case, if the patient so desires? May a poor author sell the authorship of his book to a rich man? May a poor student cancel in mid year his room engagement if he finds another which he can occupy without paying, if otherwise he would have to give up his education? Should a man save his own baby, or by turning a switch save a train from wreckage? etc. A collection of such questions with variations of circumstance was answered in writing and later explained and pressed home orally. The replies fall in general into two groups: the rigoristic, representing those who had always observed the rule of right, more or less regardless of consequences, sometimes because of the sense of authority or foreign pressure, e. g., from God, Scripture, etc. (the latter being most important among the youth from the farms); while the other class were more eudemonistic, or would be guided by general welfare or the idea of the greatest good to the greatest number. The welfare reason for adhering to the letter of general rules or commands is based, of course, on the danger of still further infractions if a single exception is permitted, the effects that would follow if everyone acted in this way, etc. The rigoristic attitude tends to disappear with intellectual progress, which inclines us to look at situations as a whole. Those who do this are more able to give reasons for their choices. With the less educated, custom or uninherited manner of conduct is more potent, the general consensus of the community more obligatory, and the conscience of the majority is regarded as a safer guide than one's own. The demands of society or God rather than an inner, autonomous, categorical imperative are normative. In such cases there is immediacy of judgment, as in judgments of beauty and taste, about which there is really no syllogistic process. None of either class of these students had ever studied ethics. Had the Arts answerers done so, they would probably have shown still further departure from the standpoint of the young farmers. Strange to say, although the number of responders of each sex were nearly equal, no account was taken of sex differences. Moreover, the author's standpoint is curiously apologetic for the very use of the *questionnaire* method, which he does in a confused and ineffective way despite the genuine value of his returns, which would be increased were they less sophisticated. One conclusion, which is not emphasized, is that the tendency of culture, which is to look at moral situations as a whole, is vastly harder than to follow simple rules. Customs are potent, and emancipation from their authority tends to make every moral judgment a case by itself, as it should be, with new and special features for which no science or prescription is a sufficient guide. The importance of each new situation and of each individual looms up into the foreground and requires a new verdict, in which innate tem-

perament, habit, intelligence, and perhaps heredity reach a new equilibrium. From this it seems to follow that, for moral education, wider knowledge of social relations is of far more practical importance than general ethical principles, which are liable to make us blind to the special features of cases as they arise and which also predispose to casuistry. Specific moral education doubtless tends to abate the influence of outer authority and to give us more confidence in inner intuition; and when this latter is reasoned on, general welfare slowly tends to supplant it as the supreme criterion. Thus the rigorism that follows the letter and admits no exception is easy, is the mark of lowly, simple, undeveloped souls. It is no doubt the safest for the masses. To make individual moral judgments requires unusual intellectual gifts and culture and exposes those who advance toward this standard to at least a period of great moral danger in which desires distort the impartiality of reason. The height of this standard is one which only a few can attain. Hence, again, we see the risk of substituting ratiocination in this field for immediate intuition.

Need of Larger and More Liberal Views on Morals.—

One of the gravest defects and dangers in our present practices here is the loss of perspective and orientation. Petty faults to our myopic conscience are seen in the same perspective as great ones. Our Catholic brethren long since sought to overcome this loss of orientation by a system involving a hierarchy, at the summit of which were the seven deadly sins: pride, avarice, luxury, enmity, anger, appetite, sloth; and the seven cardinal virtues: wisdom, courage, temperance, justice, faith, hope, and love. These have been made the basis of an excellent ethical treatise by a Protestant, James Stalker,¹ who sought to defend this view of the moral world from the charge of casuistry in so ranking and grading virtues that, in cases of conflict such as often arise, the lesser duty should give way to the greater. We may not accept these sins and virtues as supreme. The interpretations of some of them are very diverse. But they certainly teach us the great lesson that in the moral field there are almost infinite gradations of both guilt and merit, and that that life is best which takes large views of all actions and, instead of the futile aim at absolute perfection, does at every crisis the best thing on the whole. Conflict of duties, as in the case of Jephthah's daughter, and in a long list

¹ *The Seven Cardinal Virtues.* New York, American Tract Society, 1902, 125 p.

of problem plays from the Greek drama down, have a subtle attraction for ratiocination not unlike the logical paradoxes and fallacies of Zeno, but are only confusing when it comes to the issues of practical life.

Even our academic ideas and customs of teaching ethics to college youth are wretchedly unpedagogic, ineffective, and casuistic. It is doubtful whether the glib and subtle scholar who can pass the best examination on the theories of conscience, define Kant's categorical imperative, adjudicate between Hedonism and intuitionism, and characterize the standpoint of the great writers from antiquity down on the sanctions of virtue, is made morally better thereby or worse. The intellectualization of morality is a dangerous thing, because in this field what can be proven can also be disproven, and Plato, who would forbid it for boys and have adolescents flogged who wanted to study it, was at any rate half right. Morals is primarily a matter of will, conduct, sentiment; and the youthful mind is entirely inadequate to deal with the speculative problems in this most difficult of all fields. The idea of the formal methods now in use, of didacticism, of cramming for an examination in ethics to be marked and ranked, is essentially absurd, if not demoralizing in itself, for it misplaces the stress of endeavor and tends to substitute mere study for practice.

Effects of Feminism on Moral Education.—While very few, if any, text-books or even essays on morals in general have ever been written by women, perhaps because their interest in the subject, while it is strong, focuses upon so few specific aspects of it, it is their influence that has been the dominating factor in the present method of laying chief stress upon goodness and in refusing to depict evil and its consequences, as under male influence and once in the pulpit when, in the days of hell fire, the latter was prominent. But now, save in the matter of intemperance and cigarettes alone, in impressing the evils of which they appreciate the use of appalling instances, most mothers, women teachers, and men whose mentation is habitually in a feminine atmosphere, think that girls and even boys do not need to know much about badness. They still cherish ideals of ignorant innocence and moral naïveté, such as used to culminate in convents. "Why know malaria and smallpox in order to be well?" This is a pro-

found and, in its effects, often a disastrous error. Knowing evil is not halfway to doing it, but often the best of all preventives and deterrents. Why do so many young girls go wrong? Because not properly instructed and thus not armed against the wiles of the tempter. What is their plaint and that of boys infected by vice? It is over and over again with tedious monotony: "I did not know; why didn't my parent, teacher, pastor, doctor, tell me?" One method of conserving health is by describing the dangers of diseases and pointing out the consequences of unhygienic modes of living. One method of advancing Christianity is by showing the bad results of paganism and unbelief. That boys need to know something about bad boys as well as good ones is almost a platitude. What boy ever did, does, and however tenderly sheltered, can grow up thus ignorant of evil? A universe of light, with no shadows in it, would be as monotonous and vacuous as one of darkness; we can see as much in the one as in the other. An artist must know and use black and dark shades to bring out white and light ones by contrast. The very essence of moral education, consists in part of warnings and example. What would the temperance teacher do without illustrations of the evil of intemperance? To inculcate courage, we must tell about cowardice; to teach honesty, we must show the evils of lying and deceit and their bad consequences. Can anything be more obvious? Knowledge in advance preforms moral choices. Having incited children to choose aright in ideal cases, the chances are increased that they will choose aright in those of real life. How can our Lord have been "tempted in all points," if He had not known about evil? I plead for knowing evil as a safeguard against doing it. We must know the enemy in order to effectively resist or attack him. But this is a very different thing from joining forces with him. We study disease to avoid it and to escape its evils. Knowledge of it is not infection with it. Only Christian Scientists refuse to recognize and perhaps deny the existence of illness. The best medicine is preventive. The same is true of moral diseases. A great function of ethics is preventive. That we can often turn evil to good account as an incentive to virtue, no more makes evil good than the fact that Plato pointed out a drunkard to the Athenian youth to warn them against his state,

justified the besotted condition of him who was thus made an object lesson. The very function of knowledge is to save from error. It is getting experience by proxy. Thus we utilize the blunders and mistakes of others in order to prevent their intrusion into our own lives. The most interesting and most useful chapter in logic is that which deals with fallacies, as I have found by long experience in teaching it, and the more common and insidious they seem to be, the greater immunity against their habitual use the student acquires. The very first thing a reformer must know and know thoroughly, if he would be effective, is all the details and ramifications of the evil he would correct. Knowledge of cause advances the successful application of cures, and great moral movements that have lifted the world to higher levels have been led by those who knew best and felt most keenly the inmost nature of the iniquities they combated. Indeed, many psychologists are now teaching that the most fundamental characteristic of consciousness itself is remedial. If we always did aright, we should no more know that we have a conscience than he whose heart, lungs, and stomach work aright is conscious of their existence. If sin has found lodgment in the soul, we evict it by clearly envisaging it, realizing it fully ourselves, and perhaps in some cases confessing, which leads to forsaking it.

If one objects to this, that uniform goodness seems a rather dull and monotonous thing to boys, and urges that decent boys can now have all sorts of good times without associating with bad boys, I reply, of course they can and should; one of the most significant advances of modern times is the many and diversified activities in which boys can now indulge that are only helpful and pure, and these must be developed in every way and in as many directions as possible. Many of these things, now good by every token, were once in narrow, more Puritanic times, thought to be bad, but have been won over from the domain of the devil and sanctified.

The trouble is, however, that this has not gone far enough. So long as an innocent game of cards or billiards, dancing under proper conditions, an occasional boy fight for a good^d cause, certain school offenses, the heinousness of which is that they are chiefly against the teacher's ease or conventional ideas of order, an occasional bit of slang, or even a swear word, a

little swerving of truth as it seems to adults, a throb of anger, occasional association with street gangs, with a transient taint of their ways, etc., are regarded as worse than they really are and are treated as major instead of as minor faults of the young, their life is robbed of some color. A lad who has never done anything that he or his fond mother ever regrets, has something the matter with him. My mail has for years abounded with letters from aunts, mothers, and lady teachers who are distressed about the faults of certain boys, mostly in the seething age of the early teens, faults in the majority of cases which are rather petty and transient. Such boys have often been too sheltered, and when they break away a little and meet with half-bad associates, they are far more liable to be infected than if they had been a little more exposed earlier. There is no escaping the fact, unintelligible though it usually is to mothers, that just as inoculation gives immunity against a grave, by giving a mild form of disease, so there is a class of minor offenses and peccadillos, some personal experience with which gives boys immunity against graver sins. It does so by bringing into play regrets and higher powers of control and rectification, otherwise dormant in the soul, and which, like everything else, need occasional exercise in order to come to full maturity and strength. The ordinary Sunday School and ladylike morality does not understand this, and thus very often fails to deal aright with such cases. Man, and even animals, learn in matters of conduct by the method which, in the laboratory, we call that of trial and error. It is thus that all experience has been acquired. If the wisdom that error has inculcated were obliterated from the life of any individual, however good he may be, very much of the best in him would be lost. It is along precisely these lines that much observation and thought have lately been directed, and it is this that I wish teachers to realize a little more clearly; for it is here that the woman's standpoint, noble though it is, often needs to be compared with and modified by that of a thoughtful, high-minded but world-wise, boy-knowing and virile man.

¹ *The moral differences between the sexes* are profound. Convention usually misinterprets it but does not underestimate it, for it is innate and inextinguishable. The virtues of a man and of a woman are diverse in many essential respects, as are their

relations to the home, industry, and politics. Manliness and womanliness need a different regimen to bring them to their perfect flower. Patriotism, parenthood, honor, courage—how very different these are for each sex, not to speak of duty in general and religion! Men and women each have their own code and set of excellencies and even those that are more nearly the same in each have distinctions which moral pedagogues cannot ignore. Thus there is sex in virtue and a neuter ethics has its place only in the theoretical, but hardly in the practical, life. In Sparta, woman cultivated masculine virtues. Now, under the influence of school dames, boys and young men are prone as probably never before in history to affect, if not to really have, feminine ideals of morality. Here, then, should be bifurcation of method and matter. Boys and girls are reliving a stage when the field of the activity of the sexes differed very widely. If boys are taught girls' virtues, then when they become men they break into their own domain of conduct untrained for it. Thus, when masculation has fully come, they are more raw and crude morally than if they had had no instruction, because when their sex asserts itself they revolt at the virtues they have been taught because they do not fit their nature and needs and have come to regard the virtuous life as a womanish thing; and in throwing it off they become unvirtuous. The strong nature rebels at the restraints which female mentors tend to weave about budding manhood; and because they are not familiarized with other standards and have not been taught to appreciate the virtues of robust, virile manhood, dangers ensue which might be avoided. Thus, the overdominance of able, noble, mature women upon callow, young men not infrequently really results in a moral *débâcle* later as a reaction. As the school-bred gentleness, kindness, forbearance, sweet temper, courtesy, obedience, order, propriety, peacefulness, begin to pall upon the moral palate, the youth does at least one of two things when his manhood bourgeons: either he revolts and riots in bad ways for a time, or else begins to decay from within from some form of secret vice, which latter usually comes with just this effeminate pattern of outer morality which is the best possible mask of all to conceal the bad from the good women. I have come to suspect most boys in the teens who are the idols of their own

fond mothers or the paragons of their lady teachers, although I would by no means intimate that all of them are bad.

Mother and Child.—Perhaps the most fundamental moral training, in the large sense of diathesis, begins or can begin before birth. Planned procreation under the most favorable conditions for both parents doubtless can do far more than is yet known to give a right, eugenic momentum to the primal power of heredity; but this mighty and mysterious theme must here be left to the larger knowledge of the future, as must the probably no less significant matter of mate choosing. During gestation very much depends upon the mood, temper, health and occupation of the mother. She who does most for herself does most for her child, for she is now living for two. If she is habitually tranquil, poised, she is registering these states upon the organism of her child. Proper nutrition, exercise, and sleep enhance the original moral endowment of the babe, while the effects of strain, worry, excitement and ill-health take from nature and add to the task of nurture. Newborn babes are very susceptible to habit, and the regularity in feeding and sleeping can be made almost mechanical. They are profoundly affected by inevitableness, as they are by kindness in all ministrations. Touch is the chief vehicle of communication between mother and babe, and pats, caresses, handling and plenty of it, if judicious, preforms the soul for moral tractability and safeguards it against incipient perversity. Nursing, too, as I have elsewhere pointed out, has a high ethical significance for both mother and child, and without it there is moral as well as physical loss. The very presence of the parent early increases the child's disposition to do what pleases and brings smiles, and to avoid what displeases. The mother is, in a sense, in the very place of God to her child, cultivating in it just those sentiments of love, respect and service, that now develop toward her and later are transferred to a heavenly parent, and that constitute the essence of religion. The parents' psychic and physical characters affect the child far beyond the consciousness of either and almost nothing is lost upon the latter, so that parenthood throughout is a thing of unfathomable responsibility for the more fundamental things that go to make up character. It is always setting copy and example to be followed by the imitative instinct in matters which precept, when

the age for it arrives, cannot begin to equal. At this stage, if at all, basal traits—temperament, diathesis, instinct, passions, feelings, temper, etc.—are modifiable. When intelligence dawns, commands should be few but carefully chosen and inexorable; and prohibitions must be carefully and relentlessly followed up and enforced, for the very opportunity of evasion tempts to falsehood. Moral education needs an artificial environment with natural penalties that follow immediately upon bad acts, for delay and the remoter consequences of misconduct are too far away for the myopic mind of the young. It always implies some lack of respect for the parent if the child asks for reasons for commands, for complete trust would follow implicitly even a hint. Hence, too much explanation tends to diminish reverence for the personality of the parent or teacher and involves some degree of abdication of their authority. Children easily become priggish in questioning for reasons; and fond parents explain at length, pleased at their child's desire to know, and thinking he really understands, when in fact he is only playing upon the parents' weakness and immensely flattered to be talked to like an adult in matters in which in fact he has only the faintest glimmer of intelligence, though he may possibly become an effective little casuist, and argumentative relations between him and the parent take the place of plain, simple lawgiving. An Eastern proverb says, "If your child, when you command him, asks why, flog him, for he insults your superior wisdom and judgment and is wasting energy in discussion which should be used in obedience." The parent's word is law, is a mandate which the child will welcome and rejoice to follow just in proportion as he respects and loves.

Flogging.—From this point of view, physical castigation must not be entirely dispensed with, either at home or in the school, for boys. Its possible brutality is obvious as the records of the anticruelty society abundantly show. But under the influence of female teachers and overtender school boards, flogging should not be so restricted as is now usual in this country. I have studied its effects in England and believe that, wisely adjusted, it saves many boys from evil courses, wakes up the overindulged and easy going, and tends to breed a healthy spirit of manliness, gives respect for authority and

anticipates for youth the penalties that life has in store for them later if they go astray. In many cases it should be inflicted at once, that the culprit may feel the righteous indignation his fault arouses in kind but just adults. The better nature of some obstinate, impudent, vicious boys fairly cries out for the rod, so great is their need of it. It reaches cases which nothing else can and saves many in specific instances I have collected, turning the whole tide of life in the right direction at critical points. It is moral surgery applied to distorted and perverse wills. It can help even those now sometimes called morally insane, at least in the incipient stages of this mysterious and complicated type of psychic disease. For boys in or near the teens, it is sometimes the chief duty of the father to administer it; but, alas, "Where are the fathers" now in the work of education in either school or home? A little fear of it is wholesome and goes a great way and gives the best possible temper to love. In this respect our moral pedagogy is too soft; we must not always be too precipitately and ardently anxious to forgive. Still less should flogging be banished from reformatory institutions for the young. True, it degrades; but some need degradation of just this kind. Of course, a *régime* of kindness is often best for those who are callous to too much punishment; but to know that those in power cannot or dare not flog gives insubordination an unfair advantage and stimulates the rank growth of some of the worst faults. The earlier it is applied, the less drastic it needs to be. Hence, the peculiar gift of discerning crimes and vices in their tender bud is a great desideratum; while even in their more developed stage, the rod may work a wondrous and perhaps sudden change in older, hardened youth. There are cases of this kind, though happily very rare, in which the duration and severity of the castigation must be kept up to a point where the heart of the inflictor rebels, and he would fain stop in mercy, but simply must go on till the obduracy of the victim breaks either into tears or promises of submission, begging for cessation, etc., for only then is the reformatory effect secured, while a point less would result in still greater obduracy next time. Hence, if recourse is deliberately had to this remedy, it must go on to the end if flesh and blood can endure it. The boy who will die rather than yield is either physically

weak or morally insane, or perhaps both; he is at any rate indocile. This would be my prescription for the now rampant hoodlumism and for certain forms of moral obliquity which are far less incorrigible than is usually thought. Pleasure and pain are the sovereign masters of life, and educators must study again more deeply the art of administering the latter.

Scolding.—Of milder penalties scolding may and should be made a fine art. In point of fact, however, it often degenerates to nagging, querulousness, and fault-finding, which soon becomes ineffective from its very monotonousness. But it may condense to a pithy epitome of the prohibitive view of the whole line of conduct. Round, drastic characterization of bad conduct, reflecting the way in which when full blown it will be regarded by others, its results later, and the ruthless revelation of secret motives, helps the perpetrator to see himself as others see him and cures many symptoms of even hysteria. It can do much for moral perversions. Judicious, timely, personal, and sometimes even public censure is a potent therapeutic for the moralist. A little just and helpful invective may turn the sentiment of a whole class or even school if uttered by a usually poised and respected teacher of whose fundamental kindness of heart all are assured. Effective moral influences are not cold and intellectual, but hot from the heart. Why repress truly righteous indignation for a child's misconduct? The soul of childhood has many strata superposed one upon the other; and while the most conscious or superficial ones may rebel, the teacher who has the support of the deeper sentiments on his side wins a great victory in the inmost being of his pupils. In fact, this is preaching at its very best. If a teacher prefers popularity to following the course of his own deepest convictions, his pupils feel it, and the real quality of their regard suffers subtle deterioration, although perhaps neither he nor they recognize the change. In this important field we need special ethico-pedagogical studies by psychologists. A half-concealed, half-revealed art of great practical worth needs to be wrought out to a finish and put to work, and practiced a little in normal schools, even if in a moot way. Right denunciation has an eloquence and even a rhetoric all its own.

Praise.—Its counterpart, praise, should also be both studied and cultivated. To praise as well as to blame aright is a high

educational art. Both pride and shame are potent motives. To select obscure personal acts that are rightly motivated and to bring them forth to the light of day anonymously, it may be; to detect incipient group tendencies that contain magnificent potencies; to keep close to the thrilling life and interests of classes and individuals; to be ready with the word fitly spoken and sometimes to interpret dubious occurrences in a favorable way, may turn the current at critical moments and cause psychic tides to set in the right direction. This often requires delicacy and a light, deft touch. It must come straight from the heart and not seem for effect, as pupils are so prone to regard all moral utterances of adults in their behoof. Eulogy and panegyric are very ancient and effective moral engines; and Aristotle thought the business of the orator, at a time when the highest education culminated in his art, was to let no great or even good deed in life go without its due meed of public praise. This official commendation degenerated only when it could be bought. Meanwhile mentors among the pupils should be secretly on watch for golden deeds and words among their mates for the teacher's benefit, and thus he should be *en rapport* with his pupils' lives outside the school; and along with warning and admonition, should attain and utilize methodic appreciation of all possible varieties of merit. Thus, he should, in a sense, stand to his pupils in the place of communities which will later approve or disapprove their character and conduct. He should be an outer, supplementing and determining the form of a later, inner, conscience.

Rewards.—So, too, over against penalties should always be rewards; and they and their effects should be most carefully and systematically studied and administered. Prizes, badges, and *detours* of many kinds should anticipate the premiums which the world will bestow upon those who best serve it. To suspect or neglect the all-pervading motive of rivalry is a wasteful and colossal blunder. Athletics with the uncontrollable psychic enginery that supports them should teach us this. So far as the best win the best, this is a moral world. It is a low motive to be good for money or for gifts, but this is better than not to be good at all; and with growth the baser, naturally inclined, gives place to the higher motive, and material are replaced by more spiritual trophies. We recognize this principle

in intellectual work by scholarships, marks, grades, ranks, as the French have done and as the Carnegie prize for heroism now does here; while competition and rivalry are the main-spring of business. It is also the method of nature in the survival of the fittest and best, and so in the school, which is an artificial epitome of life, we should attempt the same impelling force.

Fighting.—In pondering these themes, I for one have very gradually come to the conclusion that the current interpretations of Christianity are in some respects inadequate to the present situation. Jesus did not turn His cheek to the smiter in dealing with the money changers in the temple court, and the Prince of Peace brought a sword. So I think that in our codes and ideals for the young, while recognizing the virtue of amity as paramount, we should not exclude but cultivate in due season a degree of the element of righteous indignation and of conflict. The boy who cannot and will not fight upon occasion is a coward and a milksop. He needs some experience with the wager of battle to toughen and ripen his moral fiber. To take an unmerited blow or an insult meekly means lack of virility. What would the good lady teacher or mamma who seeks to destroy the fighting mettle in her son think of an escort who would not or could not defend her from affront or assault? The world admires the great fighters, and cultivated men crowd to see even pugilistic encounters. The sight of two boys with clenched teeth and fists and glaring eyes pummeling each other may not be edifying to ladies, but it always is so to crowds, who usually want them to fight it out, provided they do so fairly, and hope to see the best win. Those who interfere on such occasions are usually either officials who must follow orders, even if reluctantly, or Christian peaceablists, or else friends of the weaker boy who fear for him. But to whip and be whipped occasionally in a good cause, or perhaps sometimes in a dubious one, is a beneficent experience for both parties. The casualties are probably insignificant compared with those of the most popular of our great academic athletic games. In my school days in the country, as in many boarding schools now, especially in England, such battles were so common that each boy knew his master; and one of the best moral experiences in my life was in being unmercifully

thrashed by a better boy for a real fault, and in myself once trouncing a bully after nearly two hours of rough-and-tumble fighting behind a barn, with a group of schoolmates looking on. At the end we were both somewhat gory, flushed, tousled and torn, minus buttons, etc.; but I am glad to say that he was most so. I know that I am a better, a more courageous, and a happier man for having trimmed that rowdy schoolmate, who is now station agent and always tells me that it was a good thing for him. I coincide with his opinion, and am proud of my part of the transaction, as he declares he is of having been overcome by me. Thus, if a teacher had dragged us apart, he would have robbed both of a mutually pleasing and profitable experience. So I say that good, gamy boys should sometimes fight, if they do so fairly, and especially if there is a moral issue at stake. I often wonder whether the time will not again come when in the armamentarium of disciplinary methods, one will not be for the teacher to occasionally condemn boys to this wager of personal encounter, hand to hand, and eye to eye, in certain emergencies, especially if he can forecast victory upon the right side. A principal in a boarding school told me of several occasions where he thought it wise to settle disputes in this way, and to say to boys not old or strong enough to be in much danger of permanently injuring each other: "I see no other way than for you to fight it out"; and he thought the *morale* of the school was made more vital thereby. He has sometimes had contestants use gloves and observe rules. If some critic objects that this is a pagan note in ethics, I reply: Not necessarily, and even if it were so, it does not follow that it is to be condemned because of its origin. Indeed, this method for adult contestants, if they must fight, has been of late earnestly advocated as having many advantages over the use of dangerous weapons in duels.

Revenge.—But has revenge or vengeance any place in moral pedagogy? This is a grave and more debatable question. Steinmetz, Ree, Edward Westermarck¹ and others have studied the psychology of this instinct, which seems to be a reaction of self-feeling against injury. At first it need not take a definite direction, and the sense of inferiority may vent itself

¹ *The Essence of Revenge.* Mind, N. S., 1898, vol. 7, pp. 289-310.

with a total want of discrimination. Many cases are given of outraged savages who kill animals, lacerate their own bodies at funerals in a fit of revenge against fate, and injure the innocent; and yet even animals usually select the right object of their vengeance. It may be that revenge, which is one link in a chain for which resentment is the best general name, is so effective a weapon against cruelty that the most revengeful tribes are most successful in survival. In blood feuds, there is some direction of vengeance against members of the tribe or family of the offender. Some codes forbid a man to be sacrificed for a woman or for a commoner, and death must be avenged on one of the same rank, sex, age, and maybe with the same weapon. Pride enters but may not be so dominant as, e. g., Steinmetz thinks. It is often a social duty and may be combined with sympathy. Cutting off an offending member is not unknown. Intentional injury is most provocative, and even savages usually distinguish between *culpa* and *dolor*. We must always distinguish between desire to inflict a counter-pain and that to remove a cause of pain. This impulse is very complex. Now, it is a slow, hard process for the child to consign penalty for an injury done to it to the slow, distant, and uncertain process of law; and for many petty outrages of the child's sense of justice, this is perhaps well and lays a better foundation in its soul for a sense of equity later. I incline to believe that revenge should be allowed a place, if a limited one, in the unwritten code of boyhood, and that it should by no means be always and everywhere tabooed. It can sometimes accomplish good as nothing else can in scotching the instinct of the bully that he can do all he will with impunity. Vengeance is often very cleverly devised by smaller boys, sometimes with almost ideal, poetic effectiveness. It instills a wholesome feeling that outrages cannot be perpetrated and provoke no reaction. Unlimited forgiveness often goes with cowardice. "Do not get satisfaction by taking it out of a smaller boy, but get back at the aggressor somehow, sometime," said a father to his son who had been deliberately rolled in and plastered with mud by a bigger boy; and so the son with his mates succeeded in treating the aggressor with a good dose of his own medicine in the same puddle next day, with a few extra daubs on the face by way of interest, and the scales of

justice again swung even for both parties and the Scriptures were fulfilled: "for with what measure ye mete, it shall be measured to you again." A pail of foul water was hung on a gate and tipped by twine at night upon a boy who was called out of the house and was soaked. The offender had no gate, and a week passed, when one night he was called by the gang whistle and tripped on a wire, which tipped a bigger pail of fouler water on him, suspended on poles; and again a moral lesson was given and received, while the mechanical wits of the avengers were sharpened. The *lex talionis* may be a great quickener of ingenuity and I ween has large pedagogic possibilities in it, which may be developed by astute teachers and turned to excellent account in some of the exigencies of boy life.

What real boy can be taught to love his enemies without danger of moral emasculation? He must and will hate them; and the moral teacher can really do little more than help make sure that the enemies are abundantly worthy of enmity, and then bid it Godspeed. In a world so full of evil and ill-doers, the maxim "Make no enemies" is craven and stultifies conscience itself. Wrath must be in a good cause and then let loose to do its purifying work. "I will repay," saith the Lord, but He often needs human aid to do so; and why should we be loth to give it when repayment is so sorely needed? Nay, what adult would not meet the great Pacificator at death with a more open countenance, if he had paid to the full all his just debts in this regard? This I find in the gentleman's, though not perhaps in the lady's, version of Christianity. Those brought up under the influence of the latter can never hate the Lord's enemies with an exceeding great and bitter hatred, and to be a good hater is more ethical than to be steeped in sugary benignity with uniform and monotonous love for all alike.

Profanity.—Again, the true Christian young gentleman never swears or curses unless for adequate occasion, but even this may arise; and when it does he must choose between the etiquette of the drawing-room with ladies present, and the instinctive reactions of a man who can rise, verbally, at least, to the full height of an extreme occasion and give things that are damned in their nature the proper adjectives, with no euphemism or circumlocution, as George Washington did. He is a

moral degenerate who uses the strongest expletives on the most trivial occasions; but not so he who applies words of awfulest connotation to persons and acts which nothing else can fittingly designate. While insisting for the young upon the adjuration: "Swear not at all," may we not add, "unless upon some exceptionally desperate occasion where profanity is no longer vulgarity, as it almost always is in fact, although it may become sublime and eloquent." In this sense swearing is permissible, but only for great minds on great occasions. Utter prohibition of the strongest of all strong languages is fit only for infantile or senile souls, for ladies, clergymen, and professors, and other gown-wearers. Here our baby morals are so cabined, cribbed, and confined that they do not fit youth, still less men, and must be stretched and the points superseded by larger codes.

Stealing.—Honesty regarding property is hard to teach, although as Kline and France¹ and others have shown, a sense of ownership is developed in infants of very tender years. To have things set apart as one's own, to do with as one will, is very dear to the infant soul, for the ego extends through all we possess. Children are often hoarders and collectors.² They brook no infringement upon their property rights—perhaps not even the touching of what is theirs by others. Their method of exchange is barter; and slowly, step by step, as the money sense unfolds, they come to appreciate the virtues taught by children's banks. Ownership is one of the best schools for responsibility, especially if of living things as pets, the care of which is an important moralizing agency. But money is a great idealizer and quickens manifold meditations as to all its possible uses. To accumulate, lay by, and store for the future brings foresight, prudence, economy, and thrift. To own also teaches respect for others' possessions; and even greed for gain by those who have much rarely prompts theft. Stealing is the vice of the ownerless. To have what has cost pain, effort, and denial to get, gives a just sense of worth and best teaches what real ownership, which should always and

¹ L. W. Kline and C. J. France, *The Psychology of Ownership*. Ped. Sem., Dec., 1899, vol. 6, pp. 421-470.

² See Caroline Frear Burk, *The Collecting Instinct*. *Aspects of Child Life and Education*, by G. Stanley Hall and others, Boston, Ginn & Co., 1907, pp. 205-240.

everywhere represent service, means. Those who have felt the joy of possessing the well-earned fruits of toil are least liable to rob others of them. The studies of children's thefts show that they are often perpetrated with great ethical discrimination, e. g., against those who have much, who did not earn it, do not use, or acquired it unjustly, are miserly, or themselves grasping. It is often reprisal committed to restore justice. They would not steal from a popular child or a kind neighbor. I often close my house for months in the summer and the boys of the neighborhood appropriate many bushels of fruit which grows there, seeming to reassert the old rights of the people to the common, all over my grounds and even on the piazza. "He has no business to have two houses when he can use only one at a time," one boy said. One June I convened the boys and told them, as the Lord did our first parents, that they might have all but the fruits of one tree if they would save that for me. They thought that fair and, as there was no tempting serpent among them, they improved upon the conduct of the original Eden dwellers, for in September the fruits of my forbidden tree were almost untouched. They had not only refrained from it themselves but had fought off other boys not in the pact, and I judge largely because they thought me, as I overheard, "a rather good one." I hope I was not compounding a felony.

Meum and *tuum* are hard to learn without *suum*. Savages have much in common owned by the tribe, although there are always some personal possessions. Many things in civilized households are simply "ours," i. e., they belong to the family. It is very white theft for children to take edibles, and not very black for them to take occasional small sums of money from their parents. In the days of slavery the negroes half owned their masters' goods, feeling sometimes that things were theirs because earned by their labor. The world recognizes that the theft of food to appease hunger or starvation is the least venial of all forms of peculation. And yet, of all the forms of petty larceny which is the chief legal misdemeanor of boys, edibles lead. Hence, a good family table removes a strong temptation to steal. As a psychological instrument for measuring out and punishing guilt here, our criminal law is the most clumsy and wooden of devices, except where the

methods of the juvenile court in dealing with all classes of swipers has mitigated its evils. Often the chief charm of thieving for boys is the battle of wits involved. Thus the gamin frequently steals what he does not particularly want in order to indulge or show off his cleverness in evading owners, cops, locks, and other safeguards, and may risk life and limb in quest of the exquisite charm of filching. A boy of twelve who woke me mornings by rapping at my door, once surprised me by having prepared a bath with every detail arranged, and while I was taking it, went out, climbed the eavespout to the second-story window of my bedroom where my clothes lay, stole my pocketbook, climbed down, and later when I came down to breakfast, gave it to me explaining that he had long wondered if he could do it, until he had to try. Next day, after pondering over my duty, I gave him his reward—a quarter for his honesty and a spanking with the back of my hairbrush for his dishonesty, though I am not quite sure that it was the judgment of a Daniel. He doubtless half intended to keep his plunder, but did not quite dare. Surely large possessions are regarded as unjust and are themselves a challenge to enforce equalization for sharing, either by craft or by force. The Spartans made discipline in thieving part of their education, to brighten the wits of boys and sharpen them in strategy and in daring to conceive and execute; and not a few children's games are really plays at theft. Even the casuistry of explanation and excuse upon detection provokes ingenuity. Does not our money-mad age, where property is God, tend to make us treat juvenile peculations *au grand sérieux*, when they should often be ignored, winked at, or at most only made the text of concise admonitions, or pilloried with satire and innuendo? Fraud is the great horror of all whose lives are devoted to acquiring wealth, and has not this contributed to magnify a type of peccadillo so germane to childhood, because to trifle with money is to some almost as sacrilegious as blasphemy against the Holy Ghost? At any rate, if I extenuate this proclivity of the young too much, most interested in this subject do so too little, so that we may at least appeal to a truth that lies between us.

Acquaintance with Badness.—The moral value of good companions, like good habits, cannot be overestimated. They

influence, in many respects, far more than parents and adults can. Children are known by the company they keep. Evil is particularly contagious among the young, and their guardians must be always circumspect and vigilant. This side of the matter we know and feel and its importance cannot be overestimated. But let us not, on the other hand, ignore the fact that good children do, and need to have some personal acquaintance with bad ones. As Sparta and Plato would show the young drunken men as warnings against intemperance, so there must be a wide and variegated range of moral observation to furnish an adequate basis for moral distinction. While I would make no concessions of this kind in the realm of sex, I would be much more tolerant than is thought wise by many, and perhaps most, of even a little personal experience occasionally in sampling most other kinds of badness. A boy who has never, never run wild with a gang, never puffed a cigarette, or felt a little tobacco nausea, never sipped liquor enough to know its smell and taste from soda water, knows nothing in his own person of what fire water would do to him; if he never played a game of chance or gambled with or for pennies and marbles, never tried to cheat or planned a run-away, never once tasted the guilty exhilaration of truancy on a bright spring morning, but has been a prize boy with never an absent or tardy mark for years; one who has never hurt an animal, but has always been ideally tender to dogs, cats, frogs, etc., who is chronically polite to girls, respectful and never impudent to all his elders and superiors, never committed a trespass, stole rides, fished, if he was a country boy, on Sunday or in posted brooks, bathed in forbidden, dangerous places, felt the pangs of conscience if he found a quarter and could not find its loser, been unkempt, dirty, soiled, torn new clothes, tried to bait or fool a cop, possibly been haled to the police court for some prank, and there had a mild taste of how the laws deal with those who break them, had spells of laziness, idleness, day dreaming, during the years of more rapid growth, wild spasms of joy, etc., when feeling in all its rich diapason was awakening, also periods of moodiness and sullenness, fits of insubordination when his own will was beginning to burgeon or when the passion for self-assertion was felt; the boy who has not boasted, swaggered, bullied younger chaps, had his

own experiences in gorging green apples and other toothsome but dangerous and tabooed dainties, when the new adolescent appetite was adjusting to its changed dietary; the boy of the avenue who never had a point of contact with any slum pal or crony—such a youth cannot possibly have much vital knowledge of moral evil and good. In all such things a touch, but not too much, is an essential part of moral seasoning and development. Boys feel this and are right. It is the prohibitive teaching of a kind of Sunday-school type of morality reinforced by maternal codes, and not the boys, that need reconstruction. Teachers of morals to the young who do not recognize all this are simply dense or dishonest; and boys unconsciously feel them to be insincere and so flaunt them. They have nearly all done about all these things and know that they have been broadened by it; so to teach otherwise is an affectation. It is immoral teaching of morality, a department of pedagogy in which hypocrisy culminates.

Now the juvenile soul revolts from such repressions, craves and pants for actual personal experience, and always has tasted and will, like our first parents, taste of forbidden fruit, to know good and evil personally. For even girls, cloistered though they be, but especially for open-air boys, the prayer not to be led into temptation is a fatuitous and iridescent dream. We should rather pray for all the temptation that we can successfully and triumphantly overcome, even as some psychological educators are now urging, for all the individual experience with sin which we can completely react from into habitual virtue with no permanent scar or taint of body or soul. Many theologians have taught that the fall brought salvation and so that both together netted more good than ill to the race. The psychology of religion shows that there is a peculiar Augustinian type of sanctity illustrated by many a saint since that is due to a reaction from even vicious lives. Probably this is not the best type of virtue, and very few indeed would seriously prescribe a course of vice as a propædæutic to holiness. Moreover, the danger of evil deeds is that they will become habitual, so that their victim cannot break away but will be dragged down. Many who have lived longest and done most of the world's work were delicate when young; some whose youth was morally sickly have become doers of

the greatest and noblest deeds. But such instances really only teach that there is hope for those who start wrong—they are not examples to follow. When we reflect that consciousness itself is caused and measured by departure from the norm, we realize that the world has to do much hard thinking and investigation to rightly orient us in this great field of moral pedagogy, beset as it is with perils and difficulties both practical and theoretical.

Companionship is a potent agent. Children, especially boys, need a great variety of associates near their own age, and without them they cannot live out completely each stage and develop all its possibilities. The studies of only children show how maimed and narrowed they are. They spindle up to maturity by short cuts, leaving many buds of possibility that do not blossom in their season but are prone to unfold later than they should; and this causes traits of infantilism like falsetto notes in the voice. The first meeting of toddling infants has often been described. There is intense self-consciousness, mingled shyness and eagerness for further acquaintance, giving or taking of toys, caresses, blows perhaps in turn according to temperament. Activity is very much sustained, perhaps causing sleeplessness and nervousness, which children who play only by themselves, and rarely with abandon or excess, do not suffer from. This give-and-take method by which children develop each other is broadening; and the education of the street has been found more effective than that of school up to seven years, according to the famous British census. Our boys need to know something of bad boys so as to discriminate between them and choose their friendships. Boys in lower school grades are often suddenly infected with the contagion of various disagreeable and even bad ways; but they overcome these contagions, one after another, and slowly acquire an immunity which needs just this experience to be effective. Here the timid moralist and the overfond parent are alike liable to err. Some exposure to evil is as necessary for moral weal as exposure to wind and weather is for physical health. Animal spirits must have their fling for they are the mettle to which growth will ultimately give the finest temper. Uniform goodness is often monotonous and wrongdoing is far more varied; but the best safe-

guard for most of these ills is inoculation with attenuated virus. I do not forget the immense evil that one really bad boy can do in a whole neighborhood. I have records of new boys who have lowered the whole moral tone of their environment for a time more than parents and teachers combined could raise it.

The susceptibility of certain ages to vileness and the ease with which certain bad things are learned, which can never be entirely unlearned, is amazing. The worst of the evils here in mind is where small and innocent boys just before the physiological age are exposed to vile ones who have just passed it. The latter seem by a perfectly diabolical instinct passionately disposed to infect their juniors with the worst that is in them. Nevertheless, while we should reduce these dangers to a minimum, we must not eliminate boys from all association with those older than themselves. This is a very grave defect of our graded school system. In the old, ungraded days the boys heard recitations of higher classes and got much from them, and profited largely from associations with those older and younger. Now they are cut off from all these sources of moral and intellectual stimulation.

Again, there is a time from six or eight to twelve when boys care almost nothing for grown ups, living out their own life; but one of the most emphatic changes in the early teens is an often marked new interest in grown ups and in all the activities and ideals of maturity. Now children are exceedingly susceptible to their elders; but all this is lost to-day for the schoolboy follows leaders of his own age who become bosses and he henchman; and thus the natural domination of maturer years is replaced by the gang instinct. The passion for meeting and just being together and having a good time, uncontrolled by adults, of merging one's individuality with that of others, is very strong and dominant near the beginning of the teens, and associations, if unfit, bring new standards of conduct and make parents and teachers suddenly realize that they are utterly helpless. Workers with boys can now do little but guide their companionships. In their huts and hunkies, the best fighter is usually the leader of the gang, which has a sense of ownership; but these organizations do cultivate loyalty so that treachery in "snitching" or "peaching" is

very rare. Certainly a little work by boys is very much better than much work for them while these rather crude semisavage virtues are evolving which are the basis of social morality.

Studies of the most popular boy show that the favorite traits their mates prefer are jollity, good temper, and exuberance of spirit. The leader must be brimful of fun, not easily mad, fair, just, fond of play; while health and scholarship are rarely mentioned. Some boys want two chums of opposite characteristics. A single friend or a number of the same type, which is the ideal of the Greek-letter college fraternities, is dwarfing. The passion for chums has become very strong as early as ten; but the ideal chum is rarely of the same age, but either older, for protection, counsel, and inspiration, or else younger, to be bullied and to serve. The power of mere proximity diminishes with age, and affinity with conscious selection comes in later. Real friendships among boys will survive a great deal of quarreling and even abuse; and methods for settling disputes are sometimes quite elaborate. Every boy certainly ought to have one or more friends that are complementary or opposites to himself in temper, disposition, ideals, etc. Young children are democratic and make no class distinctions until these are suggested by adults. Some now think that rich and cultivated families should sometimes invite to their homes the children of the poor, in order that their own may associate with them. Children of rich parents who associate only with others of their own kind are peculiarly liable to suffer from proximity, artificiality, priggishness, to develop early affectations, and become indocile, unmannerly, irresponsible and disagreeable. All such children should have a circle of friends of a class very distinct from their own, and should visit their homes and entertain them. This of itself would tend toward not only new manners but a taste for simplicity as opposed to mere costliness, and finally for a love of the genuine in place of the artificial.

Even imaginary companions often have moral significance. It is well known that many children, especially if much alone, instinctively seek to rescue themselves from the invincible stupidity that results from isolation by inventing personages that may come to be very real, with definite features, traits, and histories richly dight with circumstance, incident, and detail,

and that these fancied friends may persist for years. They are played, slept, talked with, sit at table, though they are never seen, for they are of the stuff that dreams are made of. Some now hold that children should be encouraged to construct imaginary friends; and all agree that, where they exist, the parents should help to shape their character, for this often exerts an important influence upon the real child beyond merely stimulating its fancy. It is pathetic that the passion for mates is so strong that the child who lacks them has to proceed to create them.

Truancy.—The Chicago Conference on Truancy in 1906 was a great surprise. It had long been assumed that the schools were so good that it was perversity, if not depravity, on the part of children not to attend them. This our truant laws, officers, and schools assumed. But here speaker after speaker declared in substance that it was by no means proven that the normal child ought to go to school, or that it did not have a right to go wherever it liked, barring danger and vice. So-called truants often go where they learn far more than they could learn at school, which seems very arid, constrained, and dismal as compared with life outside. The educational value of the dump, garbage heap, docks, back alleys, swimming pool, hockey, marbles, and now the playgrounds, as successful rivals of the school for the boys' affections and interests, were dwelt upon. Lads with ginger in them who love a rumpus, who need to run wild a little, and whom proper people think depraved and lost, whom weak and unreasoning parents call wayward and incorrigible, at this conference received appreciative, not to say sympathetic, consideration. Neglected children are not necessarily bad; and probation, jurisdiction of the court, and even custody should not brand the child with indelible disgrace, for these are only forms of guardianship. Probably the whole boy never goes to school: at best a majority, and usually only a minority of his powers are represented there; his zests, his imagination, his wishes are outside. Thus, he is more or less of a prisoner there, constrained against his will. What can the monotonous, stupid drill in the three R's offer that begins to compare in attractiveness to life? Is it the duty of all parents to send all children to the school as now constituted? I doubt it more and more. Compulsory educa-

tion never can be true education but will always ring hollow and false.

As to responsibility¹ the very essence of a happy childhood is carelessness. It must be cared for. To be held accountable for too little, to be too much looked out for by others, to have all done for them, and little by them, to be shielded from the consequences of their errors and neglects—makes for selfishness and brings later the chronic discontent that lays too heavy demands on the environment and on life conditions, and too little on self; that seeks rights without paying their price in duties. Such children are liable to be exacting and querulous. In industrial positions they often fail because they cannot be made to feel their accountability or their relations to the business, to others, to the whole. With possessions should always go responsibility for their care; hence the need of ownership. Those who have nothing they can call their own are prone to lack responsibility. Membership in an organization, even a gang, teaches co-operative obligations to it. In this, the isolated child is prone to be deficient. So, too, the child who has no home duties or too much help or service there, is lacking in this respect. The child, then, must feel that it owes something definite to each member of its family, playmates, teacher, school, as well as to the community. On the other hand, too much or too early responsibility is crushing, and robs childhood of its chief joy, namely—freedom from responsibility; tends to bring maturity before its time, and may develop an oppressive sense of anxiety and worry that lays the basis for various repressive neuroses later. As in so many other departments of moral education, all here, too, depends upon individual adjustments. The same burden of accountability that would overwhelm some children is the crying need of others. Thus a moral survey of the life of each should be made the basis of personal prescription. Mass training is nowhere so perilous as in the ethical domain.

Children should *honor and respect their parents* as the decalogue requires. They should do this just so far as their parents deserve it. But if the father never thought of their

¹ See a good discussion by Kurt Steinitz. *Der Verantwortlichkeitsgedanke im 19. Jahrhundert. Zeitschrift für päd. Psy. und Pathologie*, 1901, vol. 3, pp. 363-394.

procreation and violated the best conditions for this office and sought only excessive indulgence for himself with deteriorated or depleted vital fluids, if he was intoxicated, too old, infected, or exhausted, surely he is not to be revered for this defective physical paternity. Perhaps, rather, he is worthier of curses. The mother, too, perhaps did not enter upon her harder offices of maternity in a fit condition or with knowledge, or did so perhaps with reluctance or even aversion. In nursing, clothing, and caring for her infant she may have been driven only by a blind animal instinct or have performed these duties as a father who does the minimum that social decency or the law requires. If, instead of personal ministration by parents, children are turned over to others and less and less is done for them in the home, the debt of gratitude on them is less. Is it strange that under these conditions their respect for parents declines? Are we worthy of the respect we demand of them? The same question may be addressed to mechanical hireling teachers. By what right do adults claim the reverence of the young, or what is their indebtedness to municipalities with scant or no playgrounds, that have provided no baths or swimming facilities, no parks, and only a minimum of indifferent schools, and little other provision for child welfare? What claims have they upon the local civic pride and loyalty of those reared under conditions they provide? The same applies to the nation that demands patriotism and perhaps the supreme sacrifice of life. Is our fatherland intrinsically the best and does it do most for its subjects? If authority is not based on virtue, the obedience of children is simply yielding to the will of the stronger because they are the weaker and not to superior wisdom or real moral ascendancy, which should go with age. Recent and very significant studies show that children, at a certain stage of their development when they are most acutely conscious of the disparity between what they would be and do and what they can, are only too prone to wonder in their day dreams if their parents really did all their duty by them and perhaps to hold them co-responsible for their own shortcomings, just as at another stage when children's ideals are highest and seem most realizable, they often wonder whether they are really the children of their parents and imagine that they have had a greater, perhaps unknown father. For very young

children the parents are the supreme ideals; but later they are weighed and compared with others and judged in the end more or less justly; and while nothing can exceed the reverence and devotion the best parents merit, no execrations are too bitter for the worst, and the child's curse on its parents, if merited, is a fearful thing.

Bravery.—France has taken much pains to cultivate courage among children, and there are societies for giving them decorations for meritorious deeds. At a recent conference Maurice Bloch¹ describes in a vivid way many of these acts of heroism, some of them by children of eight or ten years, and also speaks of the various prizes and decorations, public and private, given to boys and girls who have distinguished themselves by bravery. One who was a soldier at eleven wrote a letter to his father before an operation which ended in death that was a model of mingled heroism and affection. One part of a battalion during the revolution was composed of lads of from thirteen to fourteen. Several great generals are named who have been soldiers and under fire at ten and eleven. Not a few of the prizes for courage are given to those who save other children from drowning or from fire at great risk of their own lives. A few have fought mad dogs to save others. At least two of these, Pasteur honored. These children were not ignorant of danger like those of more tender age who have been known to rush across the street where carriages were thickest or even before a fire of *mitrailleuse* in search of a lost ball. The history of France back to the Crusades appears to abound in illustrations of juvenile heroism. Our age is too tender to sanction the action of a group of French boys who commemorated the execution of a comrade by the Prussians by visiting the scene of his death soon after and each taking a most solemn oath to die like him at any time their country needed their lives. Nor should we agree with a Russian writer who would have children of seven learn to descend on ropes from high roofs, ride horses, throw the lasso, scale high walls and buildings so that they might help effectively in time of fire, and get the discipline that comes from being accustomed

¹ Le Courage chez l'Enfant; conférence faite au Petit Palais, Exposition de l'enfance le 7 juin, 1901. Paris, Picard, 1901, 29 p. (Bibliothèque d'Instruction et d'Education du Citoyen.)

to danger. Patriotism is best taught by making little folk great by the lessons of heroism.

The sense of *justice* is a product of slow evolution in the race and in the individual. It is based on sympathy and the power of putting yourself in another's place, or seeing ourselves as others see us. Plato thought it capable of becoming such a passion that the wise man fairly longed and lusted for punishment, if he had been guilty of any infraction of its laws, not so much because a penalty fitting the crime was necessary to bring home a realization of demerit, but because the scales of some more absolute or perhaps divine justice were out of poise and must be made true again. There is a deep sense in the race that sin must be expiated by suffering, and if it is not, that grave dangers impend not only to the transgressor but to the community. Justice is blindfolded because it is no respecter of persons. Criminology has always distinguished between mortal offenses punishable by death and less degrees of guilt. The psychology of the folk soul which has evolved transcendental rewards and penalties and devised modes of atonement and expiation by vicarious sacrifices shows the sweep and grandeur of this potent group of ethical instincts and their corrective originality. It is the sense of justice in the soul that brings a feeling of impending wrath. It thus brings fear, and in ordeals and conflicts makes those who are guilty feeble and fallible, so that these superstitious tests of guilt or innocence are often very effective. How to escape the visitations of evil due to misconduct has often been a great and absorbing theme of thought with primitive man, and many forms of solution are seen in which various substitutes and vicarious victims have been brought forward. This is the root of the very idea of sacrifice.

For the young child the law of justice should not be keyed too high. He must not be eternally under a sense of deserving evil, and retribution must be mild. Only at adolescence does he feel a sense slowly broaden and deepen toward absolute standards, until there is at least a glimpse of transcendental merits and demerits, as social and divine retaliation is sensed. The psychic roots of optimism and pessimism strike deep into the sense of justice. This is a moral world if good and evil alike get their deserts; but because this does not always appear

to be the case, heaven and hell are needed to bolster up the faith that this is a good world. Laws, tribunals, tragedy, novels, too, are effective in direct proportion as evil gets its deserts and good is rewarded. God would be dethroned if He did not bring this about.

How, then, is this corner stone of the moral temple to be laid in the souls of the young? It begins in the sense of fair play with such rules of the game as insure victory to the best man or team. Thus cheap and unsportsmanlike tricks, secret advantages, directly undermine this bulwark of ethics. An environment so organized that each gets what he earns—no more, no less—whether in the way of respect or material advantage is the vital air in which this sentiment grows. All moral education is a probation system in which just this occurs promptly and pitilessly without fear or effort. The education of the sense of justice culminates in the sublime conviction that in this world nothing really evil or no failure can befall a truly good man; and conversely, that nothing that is really good, that no true success, can ever come to a bad one.

Now, what really makes this a moral world in which this actually does occur? The chief factor in the process is the belief that it is so. If we are firmly convinced that honesty and virtue pay in the end and that vice and crime fail, they will do so. The contestant in a bad cause is only half-hearted and he who fights in a good one feels that he has the moral cosmos at his back and so, though he be weak, triumphs. A bad conscience indeed makes cowards and weaklings. Thus there is no moral progress unless we have faith that the eternal powers are on the side of right. Thus I believe there is nothing that is teachable in morals quite so important as that there is a power that makes for righteousness and against unrighteousness at the helm of the universe, and that, although wrongdoing may flourish for a season, sooner or later, in some way or other, it meets its deserts. If all men steadfastly believed that all sins would always be found out or meet their condign rewards, it would always be so in fact, for the vile would either confess or make reparation, the villain would find the furies unchained in his soul. The man who knows his cause to be unjust, fights in its defense with dull weapons and feeble muscles compared with him who is thrice armed because his quarrel is just.

Justice is thus the muse of positive moral education. All umpires, school juries, students, and committees on government should supremely respect it. By executing righteous vengeance upon others, we learn a wholesome fear that, if we are prompted to injustice, we shall expose ourselves to the same vengeance. There is a limit to asking and accepting pardon for offenses; and is it manly or womanly to let another, though it be a superior or divine friend, bear the consequences of our sin, while we go scot free? Is this psychologically possible or morally permissible? Is it not rather degenerative in its effects upon the moral sense? It is here that theology not Christ, the Commentators, but not the Bible, in evolving the theory of the vicarious atonement have wrought incalculable harm to the moral sense; and it is here that a great work of clearing up and restoration needs to be done. If I may sin with impunity because a voluntary burden bearer is always at hand eager to take the consequences of my sin, then I may sin again with impunity. It is no less cowardly and dishonorable in me to let him be the victim of my sin than if he were a weaker brother. Impunity is perilously akin to indulgence. Absolution can only abate ingrained effects of sin and this is much. But to transfer pains and penalties from the penitent to Christ is effective precisely in the same way that conjuring diseases into an animal, plant or charmed amulet is. The theory of such transference is true only in so far as it works well; and the principle is the same as that of cures by a rabbit's foot.

Thus the pedagogy of justice and responsibility is muddled, and moral endeavors are made of no avail by the prevalence of such views. The very basis of moral inculcation is that, if we sin, we suffer in our own person and pain helps us to right ourselves again. Had the dear, heavenly Father ever really provided any such scheme, or really offered Himself as a scapegoat for man's iniquities, He would have done even worse than overfond parents who spoil their children, by providing immunities. He would have sold us indulgence for sin and at very cheap rates. Years of error are atoned for by a prayer or a single act of faith. This is not in the nature of a moral world, but perverts it. This doctrine is the unpardonable sin of the church against both true religion and morals. The only

justification for it is found in the fact that human nature is so richly endowed and so resourceful that it can right itself after a surprisingly prolonged course of error and even dissipation by means of the residual vital energy that remains in it; and not only the race but individuals often need to be reminded that the momentum of evolution is great, manifold, and not easily exhausted.

Teaching Morals in the Topics of the Curriculum.—To insist that every lesson in every subject should be primarily a lesson in morals does not imply any undue subordination of the subject matter of the different branches but only a larger and deeper appreciation of the facts taught. It gives them a higher value. Thus wherever a pupil is made to feel a deeper interest, to abandon indifference and idleness, and to put more energy into any subject, he is by that very fact made morally better. History is ethics teaching by example. Its great characters and achievements fire the aspirations of boys in every hero-worshipping age. Its widened horizon tends to shame littleness, teaches to tell the truth and how difficult this is to do, impresses toleration, rebukes undue partisanship. History is the great judge and vindicator of the ways of God to man. So literature is constantly becoming, at least indirectly, a series of lessons in right conduct, sentiments and ideas. Nature study teaches to think independently and exactly, gives sympathy with plants and animals, interests in the general laws of life and heredity, cultivates judgment and critical discrimination, and gives a deeper sense of all-pervading law. Domestic arts enhance the sense of responsibility for all that pertains to family management, and magnifies woman's sense of her own function in the world and shows her how to be more effective and escape drudgery and ill health.

Industrial training part of the day has in several authentic cases actually increased the rate of intellectual progress of school children, despite the lessened time devoted to studies. We have now much literature upon this subject and very few cases show a retardation of time spent on studies. From six or seven to fourteen or fifteen is the nascent period for acquiring manual dexterity and skill, and if this is neglected during its season it can rarely or never be made up later. Pride and interest in achievement and in products of earnest, honest toil

are potent factors in character building. Hence added to the economic and vocational, a moral value is also more and more apparent in industrial education. *Thrift* rightly taught has a moral as well as a social value not yet sufficiently recognized. Boys who are taught what to do with their earnings, to keep accounts, to feel the difference between surplus and deficit, and what solvency and credit mean, who have a little savings in a bank or elsewhere, feel augmented self-respect, widened mental interests, more responsibility, foresight and power of self-denial. Thus money, ownership, possessions, the psychology of which is now being developed, are seen to have very high promise and potency of ethical development in them. The sense of having really earned money by actual services rendered gives a wholesome sense of worth and of membership in a great economic system which dominates modern life.

I would have the contents of every *reader* in the grades and all the English literature studied in the high school chosen primarily with reference to moral values and, ignoring here the dangerous principle of art for art's sake, place all stylistic qualities second to ethical values. In view of the woeiful and growing ignorance of Scripture, I would have Bible stories and selections from both Testaments taught as literature, because the alternative—this or ignorance of the Bible—is pressed upon us as more and more imperative. The masterly Saxon directness, simplicity, and virility of the English Bible is the best pattern on which to fashion style, and its moral uplift is independent of all supernal elements. So, too, I would lay the other great ethnic Bibles under contribution, with selections primarily for moral ends from the literature of Confucianism, Brahminism, Buddhism, Mohammedism, with illustrations of the Greek and Roman and Scandinavian religions at their best, which in fact are to-day even much better known by high-school graduates than the Bible. These, it must be frankly said, contain some elements of real value to youth which our Scripture lacks, for even it cannot do everything and needs to be supplemented. Thirdly, I would have all English literature and history also made the basis of a careful, well-planned, coöperative, moral survey that should select the best elements, epitomized, condensed, and adjusted to childhood, by the story-telling and “give-back” methods

up the grades described elsewhere. There is material enough in English, and translated into it, to make a secular Bible of the type Mr. Heather Bigg had in mind, of immense moral power. These things—all the way from the old animal fable up to the loftiest achievements of the sublimest men, together with proverbs, a few well-chosen hymns, and poems of virtue properly grouped in a chrestomathy—should constitute the essential factor in English in place of the wretched word-cramming analysis of texts which focuses attention on form rather than on content, which has brought instruction in this field to its present condition of decadence.

Again, the various *vocational, industrial and reformatory schools*, houses of detention, homes, and other institutions provided for boys who loath and hate the school, as a whole, fit their nature and needs better than the public school does those who frequent it. Far more wisdom and intelligence have been expended in providing for these exceptional children (as well as idiots and sense defectives) in the last few decades than in conducting the public schools. It is for those not fitted or loyal to the latter that pedagogic genius has done perhaps its very best work. The tame, docile children have the rutty, hack, conventional teachers who dread innovation, huddle together for strength and clamor for uniformity of system, and become adepts in suppressing all roystering and escapade-loving supervital human cubs into dull, cowed, commonplace, henpecked conformity, in whom the possibility of originality in thought and deed is smothered. Instead of being kept young by the children in their charge, as good parents are, these teachers grow old early because of chronic anxiety lest something vital and interesting should happen in their school-rooms. They cannot and dare not be original save in petty variations. Teachers of exceptional children, on the other hand, have every provocation for the higher degrees of pedagogic originality, and they have risen to their opportunity. It is precisely the best of the institutions provided for boys whom the stock pedagogue deems dull, bad, or both that are setting the fashion for the education of the future, where work that will pay alternates with study and play, and where social organizations, self-government, and strict moral regimen are wisely combined. The education

provided for the strong-willed, headstrong, exceptional, active boys with some of the red blood of savagery still coursing in their veins, as in the George Junior Republic, Boys' Clubs, and various institutions under the care of the courts, is to-day often nearer to the real nature of boyhood than anything that has yet been provided for the turbulent transformation stage of life. More than that, it is this education that really fits the natural, as opposed to the stall-fed, exhibition, model boys that so many parents prefer and teachers wish to turn out, that is setting the fashion for the education of the future.

Physical training, that is, gymnastic exercises with and without apparatus, finds its stimulus from within as contrasted with games and athletics which find their motives without. The former has behind it the culture motive to develop and be strong; the motive of the latter is to excel others. As an artificial substitute for work, it becomes needful somewhat in proportion as city and sedentary life increases. As boys become interested in their biceps they grow trusty and are more likely to be temperate, to accept discipline, to be more interested in wholesome *régime*. As muscles develop, the gap between knowing and doing narrows and motor mindedness increases. There also arises a salutary sense of the difference between tolerable wellness, or mere absence of sickness, and an exuberant buoyant feeling of abounding vitality, health, and vigor which brings courage, hope, and right ambition in its train, power to undergo hardship, do difficult things, bear trials, and resist temptation, while flabby muscles and deficiency of exercise give a sense of weakness, lust for indulgence, easy discouragement, and feelings of inefficiency.¹

Habits and Morals.—We do not begin to utilize the culture of health as the basis of morals as we should do, because we do not realize that their relation is so intimate as at many points to be entirely identical. Body-keeping with the young can and should be made almost a religion; and most of the worst sins and errors of youth are in no way more effectively forefended than by high ideals and a vigorous cult of personal and social hygiene. Indeed, Plato thought he could.

¹ On the three last topics, see some excellent suggestions in Stuart H. Rowe's *Habit-formation and the Science of Teaching*. New York, Longmans, Green & Co., 1909, 308 p.

not teach an invalid morals because, if he had not learned the art of body-keeping, still less could he discipline his soul. Pindar traced the pedigree of the Olympic victors back to the immortal gods; cities gave them their highest honors; they shaped the canons of Greek art; their goal was physical perfection of form and of function, to live in a body which could do everything mechanical possible for it to accomplish without break or strain. Through orchestration and dancing, physical culture became the art of the muses. Appetite was a bodily conscience like the Socratic demon, deteriorating from improper viands or too much, with a voice still and small as that of the Holy Ghost, although like it often sinned against and grieved away. Normally it should point straight to the pole of perfect health. Holiness and health are the same word; and they suggest, too, liberal, all-sided culture. Hygiene and religion have always been related even when both were most perverted. Hard as the saying is, either we or our parents have sinned if we are not in youth healthful. Most of us can be well, if we wish it intensely, passionately, and wisely enough, for nowhere is nurture more effective in mending the flaws of nature than in health. Just ordinary, mucker wellness in answer to the universal question: How do you do?—is not enough; but we should live near the top notch of our condition, which is the supreme art of life, for on such physiological altitudes most of the success and greatest achievements of men have been wrought. To be sure, there have been sickly geniuses or men of talent who have overdrawn their vitality; but the real raw, psychic stuff, the protoplasm out of which nearly every form of greatness and success is made, is the superfluous vigor given by an extra good stomach, heart, lungs, strong nerves, and muscles. This appears in childhood as animal spirits, the rapture of being alive, which is the greatest joy on earth. It gives *Gemüth*, *esprit*, euphoria, makes men mettlesome, nobly ambitious of the highest good, beauty, and truth which the gods, without envy, permit to man's estate. It makes the feelings in which we live, move, and have our being not only vital but virtuous. Only he who is well, strong, can face the world with dauntless courage and resolution to do or suffer, will not collapse under the sudden strains so liable to-day, or decline into the easy life or perhaps

to a refined invalidism and be ready for Osler's chloroform or Carnegie's pension in the forties or fifties. How we are drawn, like those who trek through arid deserts to a spring, by those hearty men and women who overflow with spontaneous good spirits, good will, and good cheer for which the soul pants and of which our nerves are often so scant! All these things are the direct products of abounding health.

I have begun a course of ethics with lower college classes and for two or three months have given nothing but hygiene; and I believe the pedagogic possibilities of this mode of introduction into this great domain are at present unsuspected and that, instead of the arid, speculative, casuistic way, not only college but high-school boys could be infected with the real love of virtue and a deep aversion to every sin against the body. Sin is sickness and virtue is health of body as well as of soul. Hence plain talks on sleep, toilet, food, dress, exercise, recreation, regularity, sex regimen and heredity, training, interest in periodic weighing and measuring, with a good deal of discussion about diet and nutrition—these, I believe, should be the basis of the moral teaching of the young. The world saw in Greece, and again in the days of Jahn a physical Renaissance; and perhaps we may now be entering a third. The first two preceded the most brilliant periods in the intellectual history of mankind. Some tell us this has been the case in Japan and likewise in Germany; since the *Turner* societies, the stature of soldiers has been increased and a new sense of loyalty and heartiness, which is the best basis of purity, patience, courage, and fraternity, has been established. The playground movement is now rapidly extending over the whole world; cities are lavishing large sums and widening acreages devoted to play. The Pope lately witnessed the contests of the athletic societies of Italy, became their patron and conferred 250 gold and silver medals from a temporary throne erected in the garden of the Vatican. School hygiene has become an international movement and has had several congresses. Even in China an imperial decree has forbidden opium and foot-binding.

The Sophistication of Conscience.—Knowledge has little or no intrinsic value in and of itself; that it has is the superstition of rationalism, and is just as misleading on one side as the

merely commercial view of knowledge is on the other. Like light, knowledge is good not to see but to see by. Careful psychic analysis shows that love of knowledge for its own pure sake is probably an impossibility; and when we speak of this, we are really concerned with the effects of knowledge upon character, which is its supreme value. It cannot exist without modifying character and conduct; and its worth is measured by its efficacy in doing this aright. Especially humanistic culture must ripen into ethical potency. Hegel defined pedagogy as the art of making men moral. Ignorance is doubtless better than knowledge that does not make us better; and there is a purely intellectual culture that is disastrous to virtue. Most of all is this especially the case in the field of the practical will, where to drag instinct before the bar of reason emasculates it, as illustrated in the following homely incident:

Years ago, a rich lady, member of Henry Ward Beecher's church, fell from a Brooklyn ferry-boat near the dock and was saved by a rough old English sailor, who plunged in and rescued her by clinging to a floating ice cake. So they had a reception for him in the church vestry, to which he was very reluctantly brought, where he was entertained, flattered, and almost dragged to the platform where Beecher described his heroic act with an eloquence that thrilled all present, gave him a purse, and pinned a medal to his jacket. "Tell us just how you did it," Beecher said; and the cry was volleyed back from the audience. The sailor, writhing and sweating with embarrassment staggered to his feet and said: "There ain't much to tell; the boat give a lurch; she pitched in; and I was standin' nearest and jumped in after her, just as anybody would do. I only done my duty. I ain't a hero and if I'd known you'd a'thought a common tar like me was trying to do a big thing and would a'made all this fuss about it, I'd a'let the — old woman drown. I wisht I had. I'll never do such a thing again, so drop it and let me go, for I've got to have a drink." And he bolted for the door. Next morning he was in the police court for drunkenness and disorder. His money and medal were gone and fame knew him no more.

In this case a sudden crisis was sprung; the deed was done. Like many of the best samples of great heroism in the French

collection, the splendid act was impulsive and unreasoning; there was no weighing of motives with a deliberative choice, for perfect virtue knows nothing of conscience or of temptation. There is just a healthy instinct pointing always, like the compass toward the pole, toward the highest good of the individual and the race. If we always did right, we should no more know we had a conscience than the well man knows he has a stomach, heart, or nerves. To be conscious of conscience means that evil has found entrance and that, if we do right we do so only with a majority of our faculties and not unanimously with them all. Very much good is done in this way, to be sure, but it is not virtue of the purest order but of secondary quality. Virginal purity never debates or parleys, for to deliberate is often to be lost; but the teachable morality of the textbooks in ethics is of a lower order than that which is intuitive and automatic. The world needs it badly enough, to be sure, but it is nevertheless essentially remedial; it is not primordial innocence but moral convalescence. Hence it is not better to have sinned and be saved than never to have sinned at all. The old sailor felt in the depths of his soul that to be made conscious of his good deed brought deterioration of its quality. If the best of us have sinned, every one of the worst of us has, like him, some trait of this pristine, unfallen, spontaneous goodness. Thus the deepest moral instinct at its best impels men to do the right, and often the ideal, thing. Happily there is much of this aboriginal goodness in the world and strains of it are braided and veined through very bad lives; but probably in every soul there is something, and in most souls much, that no stain of depravity has ever touched.

But, having once sinned and suffered because our moral instinct was not clear and strong enough to keep us right, instead of acting like the child who may touch fire and the chick that may peck at its excrement once but never needs to do so twice to learn the lesson, we let conscience brood, reflect, and worst of all regret, and so keep resolutions for reform playing over the surface of the soul instead of letting the lessons of experience sink to the subconscious springs of future action. This is merely invalidism, often interesting, pathetic, perhaps tragic in its issue; but it does not lead to righteousness but to the contorted scrupulosity of the New England con-

science. It opens wide the doors of casuistry. It is moral Fletcherism with excessive mastication of motives, ruminations of the past and general fussiness about results and details as conscience grows more and more freaky and neurasthenic. Intellectualizing moral sanctions thus dilutes will power and diverts the intellect from its essential function of making the great and essential distinction between right and wrong, the primal intuitions concerning which are deeply ingrained in every soul.

Text-book work, classroom discussions, and much introspection cause youth to lose perspective and orientation. Thus the moral sense is sickly, distraught, and freaky. It is decadence and degeneration for the young to fall into the habit of talking or thinking rather than personally acting and resolving where any and every moral question is involved. A tingling, itching, or sore conscience is thus a danger sign for the young. Only the completely matured man can guide his conduct by the *Φιλοσοφία βίου κυβερνήτης*, the motto of the Phi Beta Kappa, philosophy the guide of life.

Honor.—For these reasons I would now build upon another principle in moral teaching alongside that of conscience: viz., honor. The basis of this is found in all. What insult will make the most effeminate, flabby, cowardly schoolboy or gamin fight, or the boldest and most unabashed girl blush, weep, and hate, like the imputation of dishonor? At the lie direct or a slur at his mother, the vilest wretch will defy the heaviest odds. When honor is gone, the Japanese knight, trained in the chivalrous code of Bushido, seeks death by hari-kiri; and who would not defy it in defending a lady, even against one from whom he would personally flee. The Pauline charity is a tamer thing, but it has no more manifold and inspiring catalogue of predicates for the Christian than honor has for the gentleman born and bred. Honor, like conscience, is often very capricious, perverted, fantastic; and it may be only a crabbed, shriveled remnant as studied in its history or in contemporary instances. It is found among thieves, prostitutes, beggars, and is sought in badges, degrees, and titles of nobility that schools, colleges, societies, and kings bestow. We have seen how the French utilize this principle. The Paris preacher, Wagner, says its function is to the unborn, to teach

a life that is pure and dominated by the interests of posterity. Chesterfield said that a high sense of it is the distinctive trait of a true gentleman. Gizycki deems it ideal conduct in every relation of life. Here again we must turn to the Greeks. It has been described in Aristotle's magnanimous man, dignified in mien, slow of speech and movement, unerring in moral judgments, and in conflicts always finding the higher way; also in the imperturbable Stoic sage, who, the neo-Socratic school in Belgium say, could be completely happy in poverty, if all men thought him mean, if burning at the stake or in hell itself, if he had only the *mens sibi conscia recti*, but who without it would, like the tyrant, feel mean and wretched within though all men praised him and lavished upon him their tokens of respect; Kant's august sense of obligation from within that filled his soul with the same awe as did the starry heavens and which made him fear not only that pleasure and pain, but even future rewards and punishments would corrupt it with selfishness; Nietzsche's superman, Zarathushtra, who despised all who were not superior; the born nobleman of nature who cannot pity those whom selection ought to exterminate, who despises all dignity and eminence not based on genuine, intrinsic merit, is marked in all he says and does by inherited distinction and his friendship where he bestows it is an honorary degree. Ask yourself candidly as you look about at life and man if any moral motive, or any religion, or even love can to-day supply a stronger motive in the old and especially in the young than an appeal to honor, even though it be undeveloped and distorted. Indeed, is he a true man who would not on the instant face the king of terrors in any form to save his honor, and is not the highest thing to live for that which we would die for on occasion? What a paltry life is left for all of us if it is gone! You say it is a military and pagan virtue, and so it is; but there is also now a virile Christianity that is soldierly, and Jesus Himself was at no point less than a gentleman, but rather all that and vastly more. In every emergency to ask what is the ideal course to pursue, the highest, purest and most disinterested motive to act from, the loftiest and not the most expedient solution, choosing to be refuted by merely specious arguments rather than to use them and win out—this is honor; but to succeed by trick or subter-

fuge, to do right because it would be embarrassing to be found out wrong, to give or take secret rebates, to adulterate, to consent to corporate practices that as individuals we should shrink from, to be silent when we see imposition and outrage which exposure would put to flight—is not this always and everywhere rank dishonor? To own a dollar not honestly won and that does not represent a real service—is this honor? Honor's own true knight keeps a personal conscience that party allegiance or popular clamor cannot silence. His maxim is not the craven one—make no enemies whatever befalls—but, make the enemies of truth, right and common justice between man and man in your community your own enemies. Two years ago the English tennis champion was nearing the end of the third rubber game. Both were exactly even when the American made a fluke which would have lost him the international championship, but the Englishman deliberately made exactly the same fluke because he did not count it honorable to win on an accident. This was true sportsmanship, the very heart and soul of our country's need. Collegians need it on the diamond, gridiron, and track; how we now need it in business, trade, politics! If that were the spirit, instead of winning at any price, I wonder if we might not almost sanction racing, pugilism, and even duelling if they only were schools of honor, pure and undefiled, instead of dishonor.

The noblest of all its functions is to regulate love, for posterity and all the issues of the future of the world are committed to the honor of young men. True honor cannot possibly sneak, cheat, or lie. The life it makes us lead is single, not double. It knows nothing of two standards, one for Sunday and one for the shop, factory, or stock market; one for men and another for women. It keeps the spirit and not merely the letter of the medical, legal, club, student, and other professional codes of ethics, for it is simply ideal conduct in every rank and walk of life. It is moral idealism; it is to the inner, all that manners and style, which are so much in themselves, are to the outer, life; it is the best bond and boon of friendship—another too-forgotten pagan virtue—which in its classical sense of Aristotle and Cicero can live again in the modern world only in its atmosphere. Let us rescue it from its perversions, reinterpret it in the larger light of evolution as

having for the conduct in the future perhaps something of the same promise and potency that the stupendous word "faith" had for Paul, "justification" for Luther, "conscience" for the ethics of the eighteenth-century moralist. The mediæval courts of love and the lofty ideals of Arthur, Gawain, Launcelot, and they of the Round Table, and the Grail, conceived and idealized it as living as if noble ladies were looking on at every act, but for its knights to-day it is the whole inner vocation of man. Perhaps its destiny is to preside over and be loyal to the future of our race, to keep love high, true, and wedded to religion as it always should be, for only each can keep the other pure. To the honor of us to-day is committed the interests of all who come after us. Thus, may we not conclude that true honor should be the native breath and vital air of the true man who is also a true gentleman? This, I believe, is the basis of the ethics of the future for young men, and especially for collegians whose ideals are, or should be, the best basis from which to prophecy the future.

Albert Ungard¹ gives fifty-three German words made from or compounded with the word *Ehre*—honor, and perhaps many more definitions and descriptions of it by literary men, philosophers, soldiers, etc. These show very great diversity in its conception. It is as indefinable as good taste, tact, common sense, glory or *Gemüth*. All men and women claim it. It does not coincide with conscience. It involves some sense of worth, dignity, self-respect, and it also demands a certain respect from others, for it claims recognition. It usually involves courage and is perhaps the thing that those who have would more readily die for than forfeit. It has knightly pride and is often associated with rank or position. It involves ideals of conduct, and has been defined as the *summum bonum* of character. It is the religion of spirited old and especially young men who have wrought out codes, often very elaborate, defining how honor is won, protected, impugned, stained, lost, regained, and sometimes codifying insults of various kinds and degrees of mitigation or gravity, apologies, reparations, and as a last resort, duels in manifold forms. A recent duelling code of a German corps gives sixty-three points on which one may

¹ *Ehre und Ehrenschatz*. Vienna, Hartleben, 1908, 134 p.

be declared dishonorable and have to seek satisfaction on the *Mensur*. Honor may be ideal, or perverse, touchy and quarrelsome, and is often most challenging when least genuine. In the very active discussion now for some time going on in Germany, one side is well set forth by, for instance, Professor Binding, also by Meyer, the Austrian prince Alfonso in Bourbon, and many others, who urge that real inner worth cannot be insulted, but only the claim to it can be. It is essentially immaculate although the respect due to it may be impaired. Some urge that none but himself can soil a man's honor. It is invulnerable, and those who think themselves liable to lose it are those who possess it least securely and subject themselves to needless and often very acute anxiety. In the belief that honor can really be impaired by others lies great danger to peace of mind, to social tranquillity, and to justice. To this it is answered that one's good name or reputation may be filched and leave one poor indeed even though the *mens sibi conscia recti* still remains. Who is so strong that his self-respect is not affected, if that of others for him is lost, and what more keen moral anguish can be conceived than to be despised by those whose reverence we most desire? One may live a noble life and win the highest reputation among his fellow men seeking as the dearest thing on earth to merit their good opinion of him, and all this the slanderer may destroy and that so subtly that the law, always clumsy in such matters, provides no redress. Surely, too, the honor of a lady may be besmirched and her peace of mind thereby wrecked. The real infamy of a blow is not in the physical but in the psychic pain it causes. But is this not sufficiently punished by a counter-blow? Law courts, it is said, always underestimate honor.

Professor Lammach, of the University of Vienna, proposes to modify existing laws, and to provide a special court to protect honor. Except in rare cases, he would obviate fines, but have arrest and confinement in a specially provided and not too unattractive prison, and open all such transactions to publicity and the press. Existing codes have dealt very crudely with such affairs. But why not courts of review to obviate duels? In Austria, too, a new honor codex by Barbasetti, a fencing master, with 239 paragraphs, which regulates duels and which many noblemen and, it is said, even the emperor

revised, has lately appeared. The criminal law in that land punished duelling with imprisonment from six months to twenty years, but this code declares it "a legitimate, logical result of high character formation," "one of the noblest expressions of the human soul." Thus, what one code calls gentlemanly, the other makes criminal. An anti-duel league (1902) seeks only to reduce mortal combat to cases of very grave insult. Oethalom urges that the duel is sometimes a psychic necessity and that until complex and special laws regulate it, it will persist, despite all opposition. He gives an account of many notable duels which at least show how intricate a matter it is, especially among soldiers. He pleads that this is better than shooting down in cold blood, duels in the dark with dirks, or duels where the one who draws the black ball commits suicide, which he says are characteristic of America. Duelling has always existed and, therefore, is necessary—is the argument. It protects the honor of women. The impulse to avenge an outrage is simply irresistible. Seduction under promise of marriage, or of wives and daughters, is better punished in this way than in the open courts where a disgrace is given the greatest publicity and the press gloats over every detail so that the disgrace of the woman is maximized, while there is always the possibility of no conviction. As long as honor is dearer than life, occasionally emergencies will arise where some form of duelling, if no more than with the vulgar one of the fists, is resorted to. One reason why the duel appeals to a certain type of mind is because it is a recrudescence of a very ancient stage of life where the bully, or possibly where a strong bad man may rise above right and wrong and do his own will in his own way, trusting to his superior skill with weapons. This is more liable when duelling is chiefly with swords than when the weapon is the pistol. The first step toward reform is certainly to define honor, and this we are as yet far from able to do. The very fact that the conceptions of it differ so widely shows how difficult this task will be.

K. Bodenstein¹ tells us that honor is a high ideal good

¹ Das Ehrgefühl der Kinder. Langensalza, Beyer, 1899, 47 p. (Päd. Mag. Heft 133.)

which our materialistic age is too careless of. Everyone desires to be respected and valued by those about him. Popularity for ambition, good name and reputation, all are related. To serve one's age has often involved strange forms of honor, like the duel. Self-respect for one's own personality and resentment at any insult to it are social self-feeling. The judgment of youth is very fluctuating but is very potent upon children in the group. The teacher must judge very carefully in awarding praise and blame. Only Campe, influenced by Rousseau, would exclude the instinct of honor from the field of education, but most—Niemeyer, Pestalozzi, Herbart, Stoy, Ziller, etc.—would utilize it. *Ehrgefühl* is very different from *Ehrgeiz*. Schiller, in his "Criminal from Lost Honor," shows how disaster follows one who abandons regard for the good opinion of others about him. *Vox populi, vox dei*, suggests the norm. The Jesuits overdid appeals to emulation and rivalry. Marks, grading, and prizes may be overdone. Some think all premiums, diplomas, rank, and merit tables breed conceit, overtension and lust for publicity, and would even condemn public declamations and recitations. Daily place taking is bad. Fools' caps and seats of disgrace, severe scolding, especially contempt, injure honor, and very likely class heroes will be developed. Shutting up is dangerous. Legal responsibility, which begins at twelve, may be well used. Children should not be shamed nor their bodies exposed, and flogging should never be in public. Even to cry shame is questionable. It is well to let children see that the teacher tries to shield them from shame. Children's faults and virtues should not be talked about before them. Recognition, even by a word or a glance, is a great power, even for those who are obtuse. Honor merges into ever larger and larger circles, until finally it becomes patriotism.

Mastery and Specialization.—Alongside the cult of personal health and that of honor, I believe a third duty to self is capable of being extremely effective for morals with maturing young men of parts—and that is the duty to be master of something. I believe with all my heart in general culture. The average American probably has more general knowledge than the citizen of any other land past or present. He reads more newspapers and monthlies, has and uses more libraries

and colleges *per capita*; is more interested in other people's business; keeps studying longer on in life, as witness our summer, evening, and especially our immense correspondence courses and institutions; shifts more readily from one business or occupation to another; is always scanning the horizon for openings; listens more readily to promoters and puts his scanty savings into more get-rich-quick schemes; he moves oftener, travels more, and more than anyone else in the world has ever done has an eye out for the main chance. But when it comes to knowing and doing one thing well to the point of mastery we touch our national weakness. In the expert work of banking, in technical processes, both chemical and mechanical, in the fine crucial and determining points of trade and commerce, and the expert function generally, England has notoriously fallen into the hands of those born abroad. These things are now carried on in Germany. In not a few lines of business, art, and manufacture, we, too, have, though to less extent, fallen into the hands of alien experts, if we have them at all. This would have been far less the case here were our high protective tariffs, which too often shelter slovenly and behind-hand methods of production, abolished, so that competition were world-wide and the fittest only could survive. The tariff walls are profitable because our home markets are so vast, but they shelter ignorance, lack of mastery of industrial processes and are thus indirectly harmful to all technical and higher scientific education. Germany, for instance, a few years ago was making a profit of one hundred and ten million dollars per year for her chemical industries alone because she led the world in this line of research, some great concerns employing more than a score of university trained men in constant investigation upon new ways of cheapening cost, bettering products, and utilizing waste. Were our tariffs down, then American chemical industries and processes could only compete by rivaling in the quality of the training we give experts; but it is far easier to raise the tariff still higher than to raise the level of chemical expertness and we are too prone to the easy way.

And so it is in other fields. We are just beginning to learn the power that comes to individuals and nations by specialization which is not only economic organization of mental labor, but has a man-making power as yet hardly dreamed of.

The chief mental trait that distinguishes a boy from a girl is his desire to know, do, or be something unique, distinctive and individual, and his lack of interest in doing and knowing what everyone around him does. His complacency in ignorance on common matters that would shock a girl not to know is only paralleled by the interest he has in something exceptional. If a young man is true to the metal and temper of manhood he will strive to excel others in something in order to keep his self-respect. Common knowledge and skill have little charm and a high-school curriculum made up of uniform and identical standardized blocks of knowledge repels him so that he leaves the *table d'hôte* courses to the girls who like it and stay, and wants to feed his soul electively *à la carte*. As Emerson said, that since the world is round, every man everywhere can stand under the highest point of the zenith which slopes down in every direction from him, so in the world of knowledges and skills there are as many kinds of excellence as there are individuals with originality, if not far more, and every man not born short can find something in which he can become a master and authority and no longer an echo or a copy. His superiority may be as small as making needle points but individuality is not finished till it culminates in some special power, nor is the ideal of a democracy fully realized till every person, like each cell and tissue of our body, does something peculiar to it and better than any other does it. This instinct has just now its highest academic expression in research—a word so often misunderstood and even perverted. A scholar who has once had the experience of having made—yes, or even of having honestly thought that he has made—a new contribution to the sum of human knowledge, who has molded ever so tiny a bricklet that fits ever so obscure a corner of the great temple of truth, which we call by the comprehensive term of science, physical and humanistic, which is man's greatest achievement yet on earth, has attained his intellectual majority, and only he has truly graduated from apprenticeship to mastery. In doing this he has also won a distinctly new and fine, almost regenerated mental experience. He knows truly for the first time what intellectual freedom is. Having once spoken his word to the competent in print or where they congregate, and been heard and accepted, he is a new creature, a

citizen of the world of culture. Recognized as an authority in his field, be it ever so small, he more readily accepts the authority of others in their own domain and is therefore more docile and receptive in all other fields. Tasting what Aristotle calls the ecstasy of the theoretic life is to the thoroughbred original mind like the first taste of blood to a young tiger. He becomes fierce in the pursuit of truth. He has won a just self-respect which will help him to safeguard his moral life. The great world-soul has spoken through him. He is a real person, worth something in the world. He has a place, is of service; his life has value and meaning; he is an end to himself. After such an experience he comes to regard mere learning and knowing as on a slightly lower plane, as doing business with other people's ideas, as dealing with second-hand knowledge or with goods liable to become somewhat frayed and shopworn. The luxury of knowing without achievement does not beckon him. Scholarship is not itself an accomplishment but a means to accomplishment needful for the higher work of discovery and invention. The creative man who can truly think God's thoughts after Him in nature, His original revelation, wants to be a servant of Truth and in her pay, and experiences the lofty satisfaction of deep insight into fresh truth and of the ineluctable conviction almost lost in our day.

Is there any need in American universities and colleges today that compares with that of greater intellectual earnestness, whether for faculties or for students? In the many books we professors write, are we not too often content to edit, translate, compile, conflate, report from the great European scholars who have themselves been to the sources and plucked the fruit right off the branches of the tree of knowledge and eaten it fresh from the stem, instead of dried, preserved, or canned? Are we not a little complacent with our borrowed plumes, too unacquainted with the delicious flavor of conviction and the precious experience of the eye that first sees new nuggets of truth quarried and shining up from the very bowels of the mine? Are we not prone to turn over our little budget of knowledge from year to year in class with not enough annual increment, eternally working it over and settling complacently to professional routine at twoscore, or more or less? Or, because I confess to being guilty myself, as I do, do I therefore

suspect American professors generally on the principle that makes a villain think there are no good men and women, or would I shrive others in asking professors to become confessors merely because I have sinned myself by not living up to my ideal?

And students should ask themselves in some quiet hour what they honestly love most, study or sport, pushing out into the great ocean of knowledge or playing in the shallows of the beach? Did anyone—and this is my chief point here—ever succeed who did not love his work better than anything else? Especially when everything is so intricate and apprenticeship so long as it is to-day, he who does not so love his work that it becomes play, so that he turns to it rather than anything else, cannot win the prizes of our day. Years ago I heard Henry Ward Beecher say that the best test of a man was what he did with his leisure; and I think that the greatest good fortune that can befall a man is to be able to make as his vocation what he loves to do during his vacation. A genius will fail if he attempts too much, and a dull man may highly succeed if he focuses and perseveres. If there is something that you prefer to do to anything else, that way lies your calling, and if there is no such dominant interest that you can trust, let yourself go in, launch out and take chances, however unprecedented, new and unique it is, or however old, then the chances are that after a few years of post-graduate struggle you will join the great army of tuft hunters, seeking ready-made places, perhaps looking up a wife with a big *dot*, being proud to hold an office and wear a livery. This is already the curse of French education to-day, where, from the graduates of the Lycée up, the young baccalaureate aspires only to drop into a fat salary and wear a government uniform so that when the appointment is received and entered upon nothing more remains to be recorded of their lives save only the date of their death and the appointment of their successor. Our sires went, and were not sent, to college. They made their livelihood and did their work in the world upon the capital of the knowledge they got in the course; but with far greater opportunities, their sons and grandsons in the academic courses now too often get just enough attenuated culture to inoculate them to the point of immunity against any later, graver attacks

of the passion for knowledge. In the legislative committee, in the council of doctors when life hangs on a thread, where great business schemes or technical processes or political policies are decided, the decisive word is, and far more should and will be, spoken by the expert who has mastered all the facts and summated the world's experience. Mastery gives a sense of self-respect, dignity, worth, value, because personality really culminates in it. With a sense of a definite place in the social and industrial organism, and the sense of solidarity and integral membership which comes with it, youth are best safeguarded from a life of mere self-indulgence; and are given a potent incentive which is far more effective than any direct ethical inculcation.

One cause of juvenile wildness and even crime is the *long summer school vacation*. For two or three months, and that in the outdoor season, boys who have nothing to do are let loose on the street, where they naturally tend to grow wild and where idleness, especially in cities, does its worst for them. Perhaps worst of all is the suburb of the large city, where the fathers are all away and even a man on the street during the day is a *rara avis*. Here, distinctly new moral conditions arise. "God made the country, man made the town, but who but the devil made the suburb?" In vacations generally mothers who have been wont to the great relief caused by the absence of their children in school find it hard to have them in the house and so let them run at large. Their activity finds new vents and they range wider as they grow older and as their instincts for social aggregation with their mates strengthen. Vacation is harder on clothes, and appetites are greater and meal times irregular. Parents, especially mothers, are thus not infrequently worn out, long for school to begin, and sigh with relief when the children are well started for it in the morning, realizing that not only their own troubles but the dangers and temptations of their offspring are lessened.

Another cause of lawlessness rarely noted is the *growing absence of families of the better class during hot weather*. The very presence of the respectables in their homes and upon the street makes more or less for order in their locality; but the desertion of home for summer resorts not only impresses those who remain with perhaps slight and unconscious jealousy of

their superior position in the scale of wealth and comfort in being able to seek desirable localities, but directly awakens in those who stay a sentiment that, if the grounds of their rich neighbors are not good enough for their use in the summer, they should at least not be barred to those who live near and stay behind. "What right have people to own the most attractive homes in several places when they can only use one at a time?" is the way I have heard this feeling voiced. "We," it is said, "who must stay here despite the heat are at least as good as the workmen left in charge of the great estates"; and private grounds surely ought to be open to the public when their owners are not using them, at the very least at stated times. Thus these, barred admission to attractive domains, flaunt social distinctions in an age when socialistic, not to say communistic, tendencies are more active in the popular mind than even it is conscious of. Surely every estate should be freely opened at times, and especially when the owners are away.

In the recent movement against *child labor*, some of the prohibited kinds and conditions of work for juveniles would be in fact peculiarly helpful within the forbidden age limits, so that these laws have in some cases at least created an idleness worse in its moral effects than the former labor. Now a rapidly increasing number of children who have left school are not allowed to accept employments which they wish, and so they grow wild under just the conditions and at just the age most exposed to moral and physical degeneration. Industrial schools and trade classes provide for only a very small part of those who might profit by them, and are often not fitted, in the kinds and methods of work for which they are trained, to meet actual conditions. There is at present hardly any compulsion to attend these schools, although there should be. Many employers of skilled labor, or of that which requires intelligence above the average, have lately gradually raised the lower age limit at which they receive boys, so that older boys for minimum wages crowd out the younger. Hence the dangerous and often tragic years of from about twelve to fourteen or fifteen, just after the required schooling. Boys who then seek work can usually find only odd jobs; and those who can find steady ones often sink slowly and with great reluctance from

the prolonged stress of necessity into a life of unskilled labor with chronic discontent.

Social Workers and Psychological Experts in the School.—

Doctors have been very shortsighted, especially in hospitals where a procession of strange patients files by. Each is examined, diagnosed, and prescribed for; then the next has his turn. Now, however, physicians are coming to feel the need of team work, and so progressive hospitals have social workers to visit the homes and learn what special worries, illness of bread-winners in the family, etc., contribute, and which of these causes, which drugs cannot reach but which are part of most diseases especially among the poor, can be removed. Better yet, preventive medicine is seeking to promote health so that the truly up-to-date doctor is in a sense abolishing himself by engaging more and more in the study and practice of social and personal hygiene. It is thus found that, in nearly all cases of fault or flaw in our physical organism, as Dr. R. C. Cabot puts it, some one needs to be educated, and that some one must be sought, found, and trained. The doctor, we are told, has been too prone to judge his patients by certain rubrics, categories, and classes, not realizing that each patient presents features, perhaps the most vital ones, keys to the whole situation, that are entirely new and which have never been described in any text-books or lectures, and perhaps never seen before in a clinic. Hence the doctor must now be a humanist as well as a scientist if he wishes to see all the facts in a case.

Yet more true is all this of the teacher, who usually knows so little about his or her individual pupils, but deals with them in groups and grades; and where individuals are attended to, set rules are followed. How far all this is from the realization that every child is a unique problem by itself, and that its success or failure in life may depend upon bringing out its own proprium, as the scholastics called the particular thing in each that differentiated him from everyone else! Teachers need a great development of their sense of individuality and personality, such as is now impelling physicians to seek and, if possible, find some new scientific truth in every case instead of seeing in it only what had been seen before. Every moral fault in every child also means that some one has lacked and needed education; but to find this source of defect often requires a very

careful survey. No moral treatment worthy the name is possible in many cases until the child's daily life, food, hygiene, ethical surroundings, history, and heredity have been studied. Ordinary school codes with their rewards and punishments for specific acts are like medical prescriptions at sight, given by rule for certain symptoms. Hence trained social workers should be attached to every school, and team work between the teacher, school physician, and clinician, the nurse, the home, and the social environment is necessary to make amends for specialization of effort which ignores if it does not sacrifice the unity of the child. Soon it will be seen to be absurd to administer education alike for all, with uniformity of method and standard, without regard to poverty or wealth, ignorance or culture, disease or health, idleness or overwork, home relations, etc. The rich need expert advice for their children as much as the poor, and sometimes more. A consulting child psychologist, sociologist, and hygienist, to whom both parents and children may be taught to apply for relief, possibly with office and visiting hours, and a clientele of families, and perhaps even fees ultimately for those who can pay, with services free to all patrons of the school to which they are attached, is a growing need. Here domestic difficulties need disentangling, there the lessons of new and sudden experiences need to be drawn for those who lack the wisdom to draw them for themselves. Many a marred character can be mended, if it be once realized that souls and traits are the supreme objects of concern and that all schools ought primarily to be schools of philanthropy. Every child should have the benefit of being occasionally the theme of a conference or council, and its moral health should be prescribed for from among the growing *materia medica* now at the command of the ethical therapist, such as playgrounds and apparatus, dietaries, regimen, home and other work and service, direct charity, the type of school, or the kind of education—whether boarding or day, for normal or subnormal, defective, reformatory, etc. Every problematical or exceptional child, and eventually every child, then, should have the benefit of an occasional psycho-analysis by all the very best-established methods of laboratory and of psychotherapy where moral diagnosis and treatment can be had. How pitifully little our stock ethics knows of the psychology,

e. g., of the hard-pressed, or dreams of the new wealth of both practical and scientific knowledge not yet gathered in textbooks or even reports upon these most vital topics, which is now being garnered in the minds of experienced and sagacious social workers who get hard up against those who are themselves hard up against the great death-and-life struggle for survival!¹

Moral education must first of all remove all that cramps the soul of childhood. It must realize that some children need hard work and would be saved by it; while others need rest and leisure; some are spoiling for lack of kindness, and some for lack of severity; some need more control, some more freedom, for some are *ausgelassen* and some repressed. Boys are sometimes morally cured of their worst vices by hardship and exposure to wind and weather; while others need the greatest tenderness and protection. Thus moral education cannot be much taught in classes or by rule, but is largely a matter of individual prescription: one child's food is another's poison. There is almost nothing good and bad for all alike. Thus we shall never solve the problem of moral education until we base treatment always and everywhere upon careful study of each person. Hence the present methods of schooling masses in uniform ways, very actively and positively, disqualifies teachers for this most important of all the functions of the school. They cannot see the trees for the woods. Perhaps probation work will be of different degrees and types, so that all children can share its ameliorating and beneficent influences.

Justice that simply seeks to prove the fact or act and then apply the penalty as if all were equal before the law is now generally admitted to be obsolete for the young, although the legal mind is still prone to divide the world into two sharply demarked classes, such as criminal or law-abiding, sane or insane, guilty or not guilty; when in fact there is very little in the lives of most of us that makes either one of these exclusive of the other. All boys are difficult and probably criminal under a strict definition of that term at certain stages, because their growth is not symmetrical, so that as Barr and Taylor

¹ Here I am indebted to Richard C. Cabot. Social Service and the Art of Healing. New York, Moffat, Yard & Co., 1909, 192 p.

have pointed out, their age is made up of at least two factors—years and degree of psychic and physical development—which often do not coincide, some traits being premature, others belated, some impulses excessive and tumultuous, and others just beginning to bud. Certain it is that all who deal with boys should above all keep themselves openminded and always be ready to modify all the knowledge they have acquired before, in view of a single case. Probably our best legislation is just now provisional.¹

Correlation of Agencies.—The time is not far off when we shall coördinate all educational agencies for all classes of children of school age, whether they be actually in or out of school. Hitherto, orphanages, reformatories, institutions for the deaf, blind, idiotic, etc., have generally been under separate control and managed with very diverse degrees of intelligence. Very few or no normal schools or academic courses in education fit teachers or instructors for these institutions. All of them as well as truant schools, perhaps children's hospitals, infirmaries, nurseries, juvenile courts, child-labor agencies, crèches, and all other public and private institutions for the care and betterment of the bodies, minds or morals of children should correlate their work so that eventually it may all become so consolidated that each child can be placed in that position in the whole great system which will do most and best for it at each stage and so that changes from one to the other can be made whenever it becomes for the welfare of the child. All these are educational in the large sense of that word, although each has its own ends. Diversities of agencies, aims and methods should increase; and incorrigibles, defectives, homeless, neglected, backward children and the rest should each have special provision; but integration should keep pace with this differentiation. This is not necessary so much for economy of administration although it would bring that gain, as for increased efficacy along each line by contact with all the rest and for the all-dominant interests of the children, each one of whom should have all the advantages of such a new and vaster elective system in which parent and experts assigned each

¹ R. R. Perkins, *Treatment of Juvenile Delinquents*. Rockford, C. F. McIntosh, 1906, 77 p. (University of Chicago thesis.)

child its fittest *milieu*, whether the corrective, vocational, remedial or cultural aims dominated. One or two misfit pupils in a class anywhere waste the teacher's energy vastly out of proportion to their numbers, for work with homogeneous groups insures pedagogic economy. The same waste occurs with misplaced teachers. If all could be sure of the place in the whole scheme where they could do their best work and make themselves most valuable, there would be great gain and in this environment teachers would continue to grow and at a surprising rate.

It is from this point of view that we should welcome every step by which this great and laborious correlation is advanced—when, for instance, a superintendent is made member of the Juvenile Court Commission, or a teacher made judge, or the latter placed on the school board; where only teachers of professional training are employed in corrective institutions or in those for defectives; where charity experts and physicians interested in orthopædics or children's diseases and hospitals are brought into intimate contact with school work or administration; where the same health inspectors are employed for public schools and charity institutions, etc. This kind of consolidation which is now happily increasing should thus take account of and bring out individuality and not suppress it as is now done by the indiscriminating mass methods in vogue.

Laziness as a Root of Immorality.—The chief enemy of active virtue in the world is not vice but laziness, languor, and apathy of will. The law of least effort is universal. We economize labor by machines, evade thought by creeds, and real moral decisions by habits or, at best, rules. The learning of even so-called scholars often seems to consist largely in knowing how not to think themselves but to utilize someone's else thinking instead, as parasites live upon the food of their hosts. It is hard to reason, decide, judge; and so the minimum of labor often comes to seem the *summum bonum*. Many a man in the unconscious depths of his soul is dominated by the problem how to find the easiest way and life, and what labor-saving devices he can discover ready made. It sometimes almost seems as if a brilliant intellect finds its highest use in devising new ingenious ways of shirking. Our colleges abound in young men in quest of making a livelihood more easily than

their sires did. It requires far less effort to appropriate other people's ideas than to forge out those of our own, as Plato accused Aristotle of getting his thoughts by the lazy man's way of reading rather than by the harder and more original way of thinking them out for himself. One is hewing out fresh stones from the quarry, and the other is getting them by despoiling old structures. Genesis tells us that work came into the world as a curse, and so we seek soft berths of routine, with no appeal to originality. That few realize the horror and even phobia of work that rules in the depths of their own soul makes the matter worse rather than better. Students are peculiarly prone to this aversion for real work, and nowhere are so many specious substitutes in use to avoid it as in academic institutions. For many with little mental energy, even a serious thought of work is fatiguing and brings either despondency or resentment, according to temperament. It is hard to understand, and so they fall back on memory, which is easier; it is hard to investigate, and so they compile; hard to reason to the uttermost upon every day's research, and so they accumulate protocol data, tables, slides, or describe clinical cases, as if under the hallucinatory hope that some great synthesizer would arise sometime in the future who could find out what their data meant and work it up with others, or that the dear God who in the beginning brought order out of chaos may some day give them a single creative moment, in the fervid heat of which their unleavened, unkneced dough may be baked into the bread of life. Some students rely on coaches, ponies, while the baser sort may swindle at examinations, plagiarize, fake and bluff their way through the portals that are meant to keep the unlearned from the learned; and in many ways, by the psychology which remains to be investigated, injure their intellectual conscience itself which naturally cleaves to truth as the supreme good. How many pretend to do what they have not honestly done, scamping the duty of making due acknowledgments to those by whose work they have profited? When a discoverer gets to the point where no one else has ever penetrated, he is for the nonce beyond the reach of every critic or every kind of corrective or control and may, if he will, fabricate more or less with at least transient impunity and present clever, easy guess work as if it were hard

demonstration. Now, study or mind work is infinitely harder than physical toil; and for this reason, as well as because standardizations are more difficult, its products are often adulterated. One unique type of student, sometimes classed among the intellectuals, is of those always buzzing with busy work, actively marking time without advancing, fluttering like a candle in the wind, running up against many great topics but penetrating none, thinking themselves cultivated when they are only stimulated and excited, affecting an all-sided scholarship when they are really only scatterbrains.

Now both talent and genius, as opposed to all this, consist chiefly in the passion and love of work, sustained and severe work, in some field and upon some theme, the ability to toil on without exhaustion, because inspired by perpetual interest and warmed by self-feeding fires. Such men have an instinctive and spontaneous lust for activities which to softer souls seem drudgery. Most of us when the time draws near, as, e. g., in summing up for theme writing, when we must nerve ourselves for real mental effort, first exhaust about every method of procrastination and easement. We think of many half-relevant and incidental quasi-preparatory things to do. Perhaps we small down the task by eliminating certain sections or topics, or fleetingly think of changing to another theme which has suddenly loomed upon our interest and seems, as all new themes do, like a soft snap. It may be that we postpone portions of our work to some more convenient season, or wish various extensions of time, personal exceptions, or haggle with ourselves, commit ourselves to various resolves to finish and round everything out in some definite future time, and thus mortgage our life with obligations that will probably never be foreclosed. It may be that we linger a little longer, and still more fondly, in the stage of reading, note taking, and forestudies—but at length we reluctantly plunge in and actively do make perhaps the first real effort to think of our lives by warming up and fusing all our data, trying to intuit the inner meaning and connection, to grasp the underlying ideas and weld them into a true, logical order. It is in such an effort that the higher education culminates, because only by this can the scholar really test himself. Something like this, and this alone, is work.

Now, in the moral world laziness is the great enemy. Wrong is easy and right is hard. City youth are prone to be restless and overstimulated, to be "always looking and listening and never thinking." Amidst outer distractions they know more of Timbuctoo than of themselves. They have much experience but do not profit by it because they lack vigor and will to infer its lessons. Our moral prescriptions are usually made to fit a few great deeds, whereas moral success in modern life requires sustained endeavor to do many little things. Just here we can see how procrastination is the great paralyzer of the will and even the destroyer of character. To lie abed half an hour realizing that one ought to get up now, to carry around day after day the feeling that one ought to write a letter or do an errand and yet not to do it, to extract satisfaction from good resolves dated well ahead—"I will begin next week," to dawdle on with many unfinished things, weakens virtue by divorcing knowledge and action which should be one and inseparable. Thus we lose instead of gaining self-mastery, which is an art that requires great assiduity. By diligence virtue can be developed as good taste can.

One of the best means to this end is *meditation*. We can control the movements of the eye and thus to some extent can fixate attention and so develop associations, and thus bring out weak sentiments and ideas. We can chew our food enough by taking pains. We can learn to use our best moments for resolutions and new initiations. We can voluntarily hold before the mind the disgust that follows error and sin, which easy-going minds tend to forget and so lose their lessons. St. Dominic invented the rosary to help focus attention in prayer. The attitude of bodily devotion, like kneeling and clasping the hands, helps in prayer as gestures bring certain states which they express. We can cultivate the habit of reflection, if but briefly, when we rise in the morning and retire at night, at the beginning of a school term or its close, on anniversaries, birthdays, and the New Year. These struggles may be like those of an athletic swimmer against a current where he has to use all his effort for a long time to make a little progress; but all these things liberate power and aid self-conquest. Just as we may extend our vocabulary and improve in diction by incessant practice, so by patient attention to details we can better

our character. By directing thoughts we guide acts and feelings, and may thus divert them from things of sense to the highest objects.

Great efforts are occasionally also necessary. In some parts of our psychic garden we must cultivate a few of the largest growths and see that the soul is not too crowded with little ones. Our college associates who ridicule hard workers do so to hide their own shame. Severe toil gives not only a joy that lifts us far above petty annoyances and thus helps nervous control, but it also brings a sense of reality and worth. All strong young men need to work with ardor as if the voice of God called them. Always do the nearest if not the hardest thing, and not wait. I know a professor who has read Homer and quite a row of books during the moments daily spent at toilet in his bath room, as if *Cloaca* were a muse to whom he brought sacrifice; and I have read of a man who presented his wife with a volume he wrote in the fragments of time she kept him waiting for dinner. This gleaning of scattered moments means earnestness and high charged moral efficiency. Men who can do these things do not accept defeat meekly. They never take refuge in fatalism by saying that they inherited handicapping propensities or defects but think instead of being lords of their own fortune, and seem sometimes to be able to defy not only environment but heredity itself. They deem it weakness to control everything around them and to be slaves to a lawless and untamed self, and realize that one who rules his own spirit is indeed better than the conqueror of a city. As students they do not excuse themselves by pleading lack of opportunity or incentive. Haeckel says in substance that "the scientific output of a university is generally inversely as its size." Mere erudition does no doubt dull the intellect. The great creators in science, art, literature, and the rest have been moral adventurers, and with the greatest power of initiative are often far less learned and scholarly than even their pupils. They are full of inventiveness but careful in verification, combining criticism and creation, suggestiveness and doubt. These in due proportion make great minds whose faculties are never allowed to rust and who never would think of blaming fate, circumstance, or opportunity.

Besides languor, the other great moral enemy is *sense*.

Carlyle condemned all musing on the tender passion and called love a miserable trifle of life which in a truly heroic epoch would be hardly thought of, and condemned the novelists who make sex gratification the focus of all the interests their romances portray. Some think excessive athletics contributes to sense by way of reaction. Young men should plan to marry young. During the probationary period, if absolute victory is hard and rare, we should nevertheless not lose heart at occasional lapses. The secret of virtue here again is the control of thoughts; and to "see life" is dangerous. The Catholic Church with great wisdom in this as in so many other respects provides retreats where the young retire to take account of their moral debit and credit, to sum up results, to take bearings and soundings, to gather, store up, and assimilate the lessons of their own experience which so often go unutilized, owing to incessant outer solicitations that make us strangers to ourselves.

For moral education too much cannot be said in favor of biographies, if not too long, and of men whose lives are full of ethical uplift, and which appeal to the heroic instincts of the young.¹ Here again the Catholic Church has in its *Lives of the Saints* a great arsenal of material rich to this end. Comte in his famous calendar set apart also a lay saint or a hero of science, a hero of political or social virtue for each day of the year. We have not utilized sufficiently this powerful incentive; and even Plutarch's *Lives*, which used to elevate the souls of our sires, is now rarely read by the young. If the young, who always ought to seek acquaintance with their superiors and the best of whom tend to do so, really meet a great man in flesh and blood, he easily becomes a captain of their souls with almost absolute power. In illustration of this we need only to realize what some of the great confessors have been—what Fichte did with the students of Germany, and what Lavissee has in our own day done for and with the students of Paris.²

¹ E. J. Swift, *Mind in the Making*. New York, C. Scribner's Sons, 1908, 329 p. See Chap. I.

² In the last paragraphs I have probably drawn rather freely from the impressions left by the recent reading of J. Payot's admirable *Education of the Will*; authorized translation by Smith Ely Jelliffe, from the thirtieth French edition. New York, Funk & Wagnalls Co., 1909, 424 p. See also another book of the same title by T. Sharper Knowlson, Philadelphia, Lippincott, 1909, 210 p.

Honor Systems and Self-government by Pupils and Students.—H. D. Sheldon¹ and many others whose work I have elsewhere described² have shown the great difference between the spontaneous and the adult-directed social organizations of young people. The crude native instinct of boys to get and act together is best seen in the gang which, if unleavened by maturer influences, tends to be predatory, savage, tribal, but with a very strong, rude sense of honor and loyalty. They often tend to be independent and even defiant of restraint, but it is from the social instinct which they express that a large group of the most potent moralizing agencies must take their departure. Statistics show that the great majority of boys have at some period belonged to them or to similar organizations. They exist by the score in large American cities, in two of which nearly a hundred each have been found. Of the many studies made in this field reference to one must here suffice.

J. A. Puffer has made the best and last of many recent studies of boys' gangs.³ In 66 gangs there were 651 boys, an average of less than 10 each. Large gangs often split up into small ones. Their names are often taken from the locality, but others are unique, e. g., White Rats, Eggmen, Johnny Boys. They nickname each other from physical or psychic peculiarities: Puggy is a boy with flat nose; Cross-eyed, Ginger-head, Happy Hooligan, Pung Lung, Fat (because he was fat), Jo Six Toes (because four were cut off), Smuck, Bum, Foxy, Duffer, etc. The average age of these boys was just under fourteen, nearly all being from ten to fifteen and not very many composed entirely of one nationality, although Jews were excluded from all. Most meet daily, perhaps at street corners, most often evenings. Leaders are strongest, best players, fighters, good-natured, smartest, etc. Entrance is usually informal, though most new members have to undergo a good deal of buffeting. Few have any real initiation. They do not seek members but expel those who squeal, spy, lie against the gang or will not fight on occasion. The principle is "I stand by you, you stand by me." They divvy up plunder. Many gangs are of long standing. They tend to regard strangers as enemies, usually have nothing to do with girls unless to tease them, for it is the age when the two sexes have few interests

¹ *History and Pedagogy of American Student Societies*. New York, Appleton, 1901, 366 p. See also his *Institutional Activities of American Children*. *Am. Jour. of Psy.*, July, 1898, vol. 9, pp. 425-448.

² G. S. Hall, *Adolescence*. N. Y., Appleton, 1904, vol. 2. See p. 396 *et seq.*

³ *Boys' Gangs*, *Ped. Sem.*, June, 1905, vol. 12, pp. 175-212.

in common. Their games and nearly all their other activities require coöperation. Swimming is one of their passions. The things chiefly stolen are edibles or objects to play with, and things to sell come third. They are prone to pick up fights. The members are often migratory and often beat their way to other places. They love to hunt, fish, camp, be out nights, get close to nature, play pranks, call names, loaf, have intense passion for theaters, shows, and will do almost anything to get the price of admission. Boys of the same age have a great passion for being together. They run and hunt with the pack and are sometimes ferocious when together, showing the greatest energy, which only needs direction. At this age boys crave experience and must have excitement. Very few boys of the lower and middle social classes do not belong to gangs, which are much like savage tribes in their disposition and organization. The virtues of the gang are love of exercise, admiration of courage, strength, justice, loyalty, obedience to the leader. The gang does not develop chastity, and is often noted for uncleanness of talk, sometimes of conduct. It develops runaways as well as nocturnal habits. Some have thought its attraction inversely as the home. It is often very hard to get boys from tough gangs into clubs and it takes a shrewd man to reach them. To do so he must have courage, good nature, and generosity to stand in with and to influence them. The gang has a strong influence in subordinating the individual to the group and the general impression now is that the gang should not be suppressed but should be controlled and directed.

To make over the gang into a boys' club is a great step and a hard one, requiring a tact, skill, and knowledge of boy nature which we have not yet learned how to teach. The City Boys' Club with provision for indoor games, gymnasia, swimming tanks, reading, billiards, etc., often fails with all these attractions to draw many boys save in cold weather, because the call of the freer, breezier life of the street is louder. Many of these are designed for boys in the earliest teens and do not admit new members approaching the twenties, even though they may retain the old ones up to this age. The allegiance of the gang leaders to these organizations is often but partial; and many clubs have an upper-age limit that is too low, and seem to be afraid to break in raw, wild, older boys. This, of course, has partial justification wherever separate provision cannot be made, because pre- and post-pubescents should be more or less separated, as Crampton has so well shown, and older tend to make trouble of many kinds for younger boys. Much as has been done in this country and in England, no

city has clubs enough to provide for more than a small fraction of those who would be benefited by them; and girls' clubs are still very few. The work of providing for wholesome social intercourse between boys and girls during the later teens—which is one of the most vital of all problems—is generally regarded as too intricate and delicate to grapple with.¹ Lads who work are more amenable to all efforts to regulate their social life than are boys in school, partly because they average older, but partly also because industry teaches a certain subordination.

Still further from the gang and requiring more transformation of its spirit are institutions for boys in the early and middle teens which are mainly under religious influences. Like the Knights of King Arthur, Junior Endeavor, and many other organizations, here, too, belong mimic states which control the daily life of boys—like Boy City, Gunckel's Boyville, the George Junior Republic, etc. All these interesting institutions are the creations of tactful and devoted men, reaching a few score, or at most a few hundred boys each. They might, of course, be indefinitely extended in number and variety without limit. These I have discussed elsewhere (*op. cit.*). The actual status of the morals of boys and girls regarding certain questions of minor morals with which adults who organize self-government schemes are relatively far too much concerned, is probably correctly glimpsed in the following study.

¹ In a very interesting work by C. F. B. Russell and L. M. Rigby (*Working Lads' Clubs*. London, Macmillan, 1908, 445 p.; see also Winifred Black's *Boys' Self-Governing Clubs*. New York, Macmillan, 1903, 218 p.), much sympathy is expressed with the efforts of youths and maidens to get together as seen on the streets which are often unpleasantly crowded when they promenade, and where there is often rough horseplay and jostling in the instinct of fun. These authors think that even pick-up acquaintances here are often salutary and may lead to excellent marriages. That the sexes must meet in this way, however, is unfortunate and is a sad commentary on the lack of homes to provide for their meeting under normal conditions. Buck says, "Ultimately girls and women in every rank of society are very much what boys and men make them." If lads appreciate or condone boisterous jesting or unseemly familiarity, girls will follow the lead, but they have great influence in turn upon the propriety of both word and deed by the boys. In the middle teens he deems it very necessary that adequate provision should be made for proper, natural and innocent friendships between the two, that they may learn to understand each other better.

Dr. A. Tanner¹ collected data of 615 boys and girls, mostly from 11 to 15 years of age, and found that 75 per cent would not tell on a playmate; 17 per cent would lie to protect him; 71 per cent would not cheat in a game; 71 per cent would return a lost article they found and whose owner they knew, if they disliked him, whereas 92 per cent would do so if they liked the owner; of girls 46 per cent would tell on a playmate, as against 25 per cent of boys, showing either that girls' consciences are more tender or that they have less *esprit de corps*; 23 per cent of the boys admitted that they would cheat at a game, as against 12 per cent of the girls; 45 per cent of the boys would put bad money in a slot machine, and 52 per cent would pass it, as against 18 per cent and 5 per cent of the girls respectively. Far more would do wrong things to help others than to help themselves. Moral matters like these are with children of this age not so very unlike matters of taste. Their conscience is largely a social product, so that it is not being discovered, but being condemned, that is dreaded.

In grammar grades Wilson L. Gill² has embodied one of the best-known and most influential schemes of pupil self-government at the State Normal School at New Paltz, which has three school cities: the primary for little children, the intermediate for older boys and girls, and the normal for young men and women. Each of these is organized into wards, has mayors, sheriffs, judges, etc., with constitutions increasing in elaborateness up the grades. The three cities constitute the school state. A school city imitates, as far as it can, a real city government. The greatest penalty is the deprivation of the rights of citizenship.

Colin A. Scott allows children in the lower grades to form themselves into spontaneous groups, on the basis of mutual attraction, and to do certain things: print, cook, etc., which he seeks to guide and utilize.³

A more elaborate and apparently successful form of self-government in the grades is that of the New York City grammar master, Cronson, who organized the four upper grades, comprising some four hundred children, into a city, of which each class was a borough, and all together constituted a nation. His book⁴ is the most stimulating and interesting of all the literature that has yet appeared on self-government for the public grammar school, and is far too complex to describe adequately here. There is a constitution, by-laws, legislative, executive, and judicial functions, borrowing almost every feature from city, township, State and national administration.

¹ Children's Ideas of Honor, Ped. Sem., Dec., 1906, vol. 13, pp. 509-513.

² The School City; report on the system of civic education devised by Wilson L. Gill. Reprinted from the Journal of the Franklin Institute, Philadelphia, 1903, 11. p.

³ Social Education. Boston, Ginn & Co., 1908, 300 p. See Chaps. VI and VII.

⁴ Bernard Cronson, Pupil Self-Government. N. Y., Macmillan, 1907, 107 p.

Boys edit papers, make and audit financial reports, conduct charity agencies, hospitals, fresh-air funds, perhaps wear a uniform, sometimes multiply officials so that there are few privates left, have rapid transition of office, levy and raise taxes, have elaborate political campaigns with debates and mass meetings, map out imaginary cities with parks, fire, health, police, educational, and penal departments, show plenty of partisanship; and all this work is said to give much zest to the study of history, parliamentary law, and social and civic institutions generally. The truant squad seems particularly effective in a largely Italian population. There can be no doubt that many boys under the right leaders can and do derive much advantage from these organizations, but there is always need of wise and experienced guidance; and wherever such an institution succeeds there is always back of it some person with insight and acquired talent for this peculiar work and giving much time to it. It is thus at root a mode of control by adults. Usually the young are subjugated and led by a wiser leader, and the gang spirit is sublimated.

W. B. Forbush,¹ than whom the country has no better authority or wiser leader in this field, thinks that the instincts of play and friendship which animate all kinds of juvenile organizations are on the whole best put to work in connection with nature study, field work, woodcraft, and camping out, with a spirit like that represented by the better part of Thompson Seton's Indian work, Baden Powell's scouting parties, Y. M. C. A. camps, and the farm and garden work of Doctors Hodge, Bigelow, G. E. Johnson, O. J. Kern, Rufus Stanley, and the Cornell people. Dr. Forbush has catalogued nearly one hundred and fifty clubs for street boys, reaching perhaps 100,000 members, and the Y. M. C. A. reaches twice as many. When we add to this the work of the social settlements, the churches, the twenty-five national movements for the uplift of boys, we realize how extensive this work now is. Mass clubs, which began forty years ago, need to be broken up into small groups if there are workers enough, and yet the *esprit de corps* of the larger group should not be lost. If educational or religious work is pushed too far, the club becomes a girls' society, so that the rude virtues of the gang must never be eliminated or the club will share the fate of the famous horse in myth whose fodder was reduced a few grains of oats per day to accustom him to eat less, a scheme which worked well until the horse died. Boys go in groups even to revivals and when they join the church they enter, as Coe puts it, "God's gang." They must not be educated to become "perfect ladies," as Forbush declares he was at first. The key-boys must be picked and the club raised to the level of the best instead of being allowed to sink to the level of the worst, as it tends to in the gang. Frank Parsons and the Y. M. C. A. are doing good work in aiding boys to a wise choice of vocations. The question, however, will not down, in the survey of

¹ Boys' Clubs. Ped. Sem., Sept., 1909, vol. 16, pp. 337-343.

all these activities, whether or not a strong man could not do better by direct personal action upon the boys, or at least whether the club should obviate that and whether many workers do not oversocialize the boy at the expense of some precious factors of individuation. The boys' club is a great agency in breaking down the barriers of mutual ignorance between adults and childhood and teaching the former the dialect of childhood. The club is a necessary supplement of home, school and church. The more boys are really understood, the better they seem to be at heart, at least as they can be isolated from bad environments.

As to self-government in *secondary schools*. While formal honor or self-government schemes are almost unknown in normal schools beyond bringing the faculty and students together if there is misunderstanding, there are a few public high schools, still more private academies, manual and industrial, and most of all military schools of secondary grade, that have tried some of these autonomous schemes.

The advocates of these schemes illustrate the strong drift which is characteristic of the present to oversocialize young people. There are in fact two elements in education, proper balance between which is of vital consequence. First in time if not in importance comes the evolution of personality, the development of the individual. No person is educated until he has found his own proprium or the interest by which he can be most controlled, kindled, the thing for which he has most ability and can do best, or the conviction that he is ready to stand by. City boys more than those from the country are prone to think, act, judge, in masses and therefore to become all alike. The large, graded class, too, tends to blunt and efface individuality, which is the most precious thing in the world. The self-governors aid this process. We cannot be too frequently reminded that no two people are alike, that every boy needs individual treatment, a mentor, adviser, or some one else to study him to find what vocation he is best fitted for. Few are so able that they will not fail if they do too much or fall into the wrong niche; and few are so stupid that they will not succeed if they find their right niche and limit themselves according to their talent. Education of old used to lay great stress upon periods of retreat, meditation, solitude, that one might get a little acquainted with oneself, which in our age young people know nothing of. Until one

has once had the experience of standing on his own conviction against that of his fellows, until he has found that he knows some one thing that no one else does, or can do something unique and peculiar, he has not found himself; and oversocialization makes young people to-day drift still farther away from true self-knowledge.

The term "pupil and student self-government" is somewhat non-descript. It designates an amorphous thing which might be measured on several scales, viz.: (1) Up and down the grades. Certain forms of it are found in university and college and students have had no acquaintance with anything of the kind in their previous course. Again, Arnold, of Rugby, governed his students through the upper class which he ruled himself. In some of our schemes little tots who can only make their mark in the lowest primary can vote, although illiterate voting is excluded in our republic. (2) These schemes vary immensely in elaborateness. Sometimes there is nothing but a small committee of students steered by members of the faculty, or the principal, or teachers. The pupil members are supposed to influence their mates, but the latter are not affected. While at the other extreme we have the complete state with almost every institution found in city or nation represented. (3) The topics considered by the pupil self-governors have a wide range. In the higher academic grades the government often deals with nothing save cheating in examinations; while in some of the lower grades every civic duty and many matters of personal morality are included. It is rather curious that the higher up the grades we go, the less the range of these schemes over conduct. We should suppose it would be the reverse. While space has only three dimensions, self-government has a fourth, viz., it may be measured by its departure from the gang. The street boys' club is the first step away from it, while some of the purely church organizations have succeeded in depurating most elements of the gang; and in proportion as they do so, the organization leads rather a pallid life, because leaders forget that this is the stage of only the cruder virtues, and that boys will not be made into a girls' society.

In public high schools it is rare. The most successful attempt I know of the former is at the large and very well-equipped Polytechnic High School of Los Angeles, which trains students of mature years and mostly of serious purpose for their work in life. The scheme originated spontaneously when the school was small but now works well with two thousand pupils. It is now known as the Associated Student Body Organizations, the membership of which is composed of the presidents of the several minor organizations and two members of the faculty elected by it. The organizations represented are: the boys' and girls' self-government committee, the scholarship committee, custodian committee, fire department, ath-

letic committee, Ionian society, oratorical society, editors, board of control, information and reception committee, and musical organizations. The purpose of this higher body is to consider all questions referred to it by the principal or any student club, to conduct school elections, formulate rules concerning the award of emblems and conferring of honors; yet in all matters the principal is the ruling power, and all the power given to the students is understood to come from him. A detailed constitution regulates the qualifications of officers and their duties.

Private high schools have in some instances adopted modified forms. The Hotchkiss School at Lakeville, Connecticut, requires students to give their word of honor to observe the school rules in respect to smoking; and with regard to this the method seems to work well. The Branham and Hughes School in Tennessee has a scheme aiming at unity of action, academic pride, and definite convictions. The principal's rule is stern, but students' opinion and cooperation are sought, especially in athletics. The Worcester Academy has a board of monitors centering in four seniors chosen by the faculty, together with three more nominated by the faculty and elected by the students. This board reports infringements of rules and makes recommendations to the principal. Every scheme involving detective or espionage work is very unpopular here. The scheme works best where there are military features, like the Marion Military School of Alabama, which has a system of self-government much like that of the University of Virginia, with a constitution that vests authority in a faculty council and a corps of students or commons, including all members of the school not in the council. The judicial department consists of a supreme court and a lower court, the former sitting in such cases as lying, cheating at examinations, drinking, licentiousness, and participation in any combinations against self-government; while the lower court sits on offenses of less grade. In the Bingham School, now in its 116th year, each student solemnly pledges as a gentleman to abstain "from having anything intoxicating in his possession or under his control, from handling an intoxicant belonging to another, or from going into a drinking saloon, from having any deadly weapons, including cartridges, in his possession or under his control, or from handling a deadly weapon belonging to another, or from using the school arms except under orders; from hazing (as defined by the faculty) in any shape or form, directly or indirectly." This is defined as "not letting a comrade and his things alone" and includes causing the comrade to fag. All examination papers must be accompanied by a statement upon honor that no aid is given or received; while candidates for athletic honors pledge themselves to obey the captain and coach and to abstain from immorality and tobacco during the athletic season. In the Virginia Military Institute the discipline is strictly military. The cadets are taught that courage and personal honor are the first essential to the soldier. The associates of a dishonest cadet would

report the fact to the authorities but they would not report an immorality. This is typical of various other schools.

The very essence of docility is submission to authority. This is one of the primary instincts of all gregarious and social animals. This is seen in the savage tribe, the gang, the athletic team, in fagging and hazing, and in military systems. Boys crave leadership and yield their own wills implicitly to coercion, if only they feel it wise and benign. They obey commands and grow thereby in trust and loyalty to persons, which Royce has shown to be so fundamental to every social virtue. They are innate hero-worshippers and followers, as if they craved a master and would make one, even of cheap material, if they failed to find him at hand. They will do and be almost anything with amazing plasticity for those whom they really respect and admire. From such they take orders on faith and without question. This means that their very nature and needs cry out for drill, discipline, *Dressur* and habituation before their reason is developed enough to justify what is required of them. This keeps the soul open, receptive, growing. If thoroughly trained and broken into right usages when they are young, they will, when they attain years of insight, rejoice to find that their very automatism does so much and so well for them. Plato would flog young people prone to reason about moral questions; and Aristotle thought all matters pertaining to politics and statecraft the supremest function, to be reserved for the wise and most mature men; it was for him that in which all education culminated. To do duties comes first in the apprenticeship of life, and is the only warrant for demanding rights. Our training often reverses this and makes the young clamorous of their rights and neglectful of their duties. Now, were self-government for pre-pubescent in the grammar grades desirable, our survey shows that it is almost unrecognized in American normal schools, so that one fourth of our teachers who enter the profession actually do so totally unfitted to inaugurate or direct it.

After these general and special reasons, I cannot be so very ardently desirous of a speedy, general diffusion of the system into the grades, much as I admire and commend the results sporadically attained, for I fear that, with all its

triumphs, there is danger of some loss in the general spirit of docility and obedience to authority. I fear these systems must be further safeguarded to prevent some weakening of the wholesome and fundamental instinct of unreflecting loyalty to commands without precocious, casuistic ratiocination concerning matters the juvenile mind is not mature enough to cope with without danger of forcing and overtaxing the intelligence at the expense of the more basal discipline of the will. Nature inclines childhood to be happy and careless and to seek unlimited freedom in order to learn wisdom at first-hand by more or less personal experience with folly, and to postpone the day of assuming the control of adult institutions which tend to rob the soul of boys of its gamey flavor, to reduce the capacity for originality, and to reverse the good old Bible adage that states that we must learn to rule ourselves before learning to rule cities. On a good horse ranch, thoroughbred colts are early broken into trotting with their utmost speed at times, and for the rest roam the pastures freely until they are quite mature. I confess that these little grammar-school statesmen and women, mayors and mayoresses, judges, and aldermen and women, in knickerbockers and short skirts, do not seem to me to be real boys and girls. As a rule their published photographs do not attract me to make their personal acquaintance. Are they not missing something precious and basal that belongs to their stage of life and which cannot be given later? Boys of this age are capable of almost any folly; but they are given not only the burden of responsibility for their own conduct, which should come slowly and late, but also for that of others. Hence, so far as I have observed, they sometimes tend to become precocious with their factitious authority; others are a little burdened and anxious; some feel it to be unreal, a little like the paper money of Boy City, valid only within the institution, and not to be taken too seriously; while there are a few, especially those not officials, but only privates, who remain rebels at heart, ready to revolt and assert their feral nature if good opportunity invites. Is all this better than unquestioning obedience to wiser elders? Again, at an age when manhood begins to assert itself, is it good for boys and their allegiance to school to rule and vote with and be under girls? Are such schools training suffragettes, and is

this the best training for future mothers and housewives, or does it tend to obliterate sex distinctions which God and Nature have established? A captain and military atmosphere would suit this stage of development better. Again, true democracy and republicanism came very late in the world's history and are for fully matured men, while if there is anything at all in the recapitulatory theory, children of this age are still in the monarchical stage of life, and need to be put through the paces and antics of a stage, where they are really henchmen, subject to the dominion either of the boy leader or of the man who is the power behind the throne. So difficult is this form of government of the people, by the people, and for the people, that we may seriously ask ourselves to-day if we mature American citizens have yet learned the arts and acquired all the virtues involved in self-government to such a degree that their success on our shores is finally assured, so long as municipal and national corruption are so rife. Is our legal age of majority, which brings the right to vote, too late? And do not boy methods of election make the boys who are still in the gang stage wiser in the methods of the boss and expose them to adopting the spirit of henchmen and followers? I fear that in many juvenile organizations other things are really learned than the august duty of citizenship "casting with unpurchased hand the vote that shakes the turrets of the land."

In fine, then, my plan for pre-adolescence would be a touch, but not too much, of self-government. We might organize an upper class or two, for Arnold accomplished much of his reforms through the highest class alone; but the organization should not be too elaborate. We might observe and utilize social groups in the lower grades and go a little ways with Colin Scott; but in this work we should carefully follow quite as much as lead the children; and for the rest we may well wait, watch and perpend, and above all, study and visit personally, if possible, every school where special efforts in this direction are made and get behind the scenes or the printed page, talk with the boys, observe their real attitude both in conducting their organizations and outside, and be judicial a while longer, ready and open minded to follow just as far as we are wholly and heartily convinced; for without whole-souled enthusiasm and faith we can do nothing here. But let

us not forget that, in the moral regimen of boys, there must always be left ample space for unexplainable commands and implicit obedience. These schemes need a male master rather than a female teacher at the helm. While I am not a violent antisuffragist, I think that in the present stage of our social evolution man has more experience and more natural zest for politics than woman. At any rate, boys of this age will not take kindly to female leadership in practical civics. I think we must, however, conclude that the success already achieved constitutes a *prima facie* case for further observation, which challenges all those who are interested in moral education, and that we must all of us be ready to lay aside all prejudices and preconceptions until convinced; accept new light and walk in new ways, as soon as we are fully persuaded, no matter how old or how firmly anchored we now are in current theories and practices.

Passing now to *colleges*. It may be well first to glance at the natural status of the minds of male and female collegians concerning matters where honor and self-government are most involved. We have two studies that bear immediately upon this topic.

Earl Barnes¹ analyzed written returns from 65 male and 59 female students in three colleges as to whether they would report students who had stolen an examination paper from the printer and used it in advance, and found that 30 per cent of the men and 29 per cent of the women would not do so, while 43 per cent of each sex would not report ordinary cheating in examination. If, however, the penalty was expulsion rather than loss of credits, 64 per cent of the men, and 67 per cent of the women would say No to the first, and 75 per cent of the men and 67 per cent of the women would say No to the second question. The reasons given for silence are that it is the professor's business, or not the student's, that tale-bearing is low, that it really affects only the culprit, is useless, would make enemies, etc. The reasons for reporting, also in the order of frequency, are that cheating wrongs honest students, hurts the institution, makes the concealer an accessory, is a duty to society and to the culprit. Thus personal precedes and probably prepares for social ethics; if so, the former must have a period sufficient to lay foundations. The motives of those who would not report, be it remembered, are the same that make democracies slow to take up arms

¹ Student Honor; a Study in Cheating. Internat. Jour. of Ethics, 1903-4, vol. 14, pp. 481-488.

against public abuses, as here many know them but lack the courage to do so. This inevitably raises the question whether the teachers' efforts to bring students of all grades to their views concerning examinations do not really result in blunting, instead of sharpening, the sense of honor.

Dr. A. Tanner¹ collected sincere answers to very personal questions in 440 written returns from girl students in twelve colleges, and found that 40 per cent of the girls kept their money if the street-car conductor failed to ask them for the fare. Just half would tell the teacher beforehand if they were unprepared, and the other half would run the risk. Sixty-seven per cent would bluff, if partially prepared and were called on to recite; 69 per cent would avoid a girl who cheated in examination so as not to have to report her; where the honor system prevailed, 52 per cent would report a cheater; 50 per cent would exaggerate to give zest to a story or conversation; 65 per cent would tell a white lie to save people's feelings; several say that love is of more value than truth; only 14 per cent would take another's plot on which to write a supposedly original story; while 37 per cent would tell a credulous girl outlandish stories; and 21 per cent would use ponies or interlinears; 27 per cent would use a point incidentally seen on another's examination paper; 54 per cent would permit a person to have an ungrounded favorable opinion of themselves; if they cheated, 57 per cent would deem it more honorable to do so openly than secretly. If these returns are sincere and typical, as the author claims, they are very significant.

In college grades most efforts at student autonomy have been directed against the evils illustrated in the above inquiries. Anna L. Kranz has lately gathered her data from thirty-three institutions of collegiate rank that have some kind of honor system, hardly two being alike, but varying with the conditions of each institution. There is generally a student senate, usually elected by students, but sometimes by the faculty. The members of this board vary from five to fifteen, and their authority ranges all the way from simple espionage of conduct on the campus and dormitories to suspension and expulsion. Often the code applies only to examinations and recitations. Where it includes more, plagiarism before literary societies and college magazines is most often provided for, then comes conduct outside the classes and miscellaneous conduct. There is usually some kind of constitution regulating elections, specifying jurisdiction, method of procedure, punishment of

¹ The College Woman's Code of Honor. *Ped. Sem.*, March, 1906, vol. 13, pp. 104-117.

the guilty. College sentiment and tradition in this matter vary very greatly in different institutions. The history of honor systems has almost nothing to do with those existing systems which have been created *ad hoc* by some enterprising president or by others, although to this rule there are two well-known exceptions.

The first is the University of South Carolina, where an honor system began in 1805, and the University of Virginia in 1842, although the University of Illinois had one in 1868, Maine State College in 1875, and Amherst in 1883. The *honor system in Virginia* is the best instance of a natural spontaneous growth of student government which this country affords and has set the fashion for others. In recent decades it has come to leaven the entire spirit of the university and has set patterns for many imitations, especially in the South, where the appeal to the sentiment of honor has been far more effective than in the North, owing to the old cavalier spirit of which the duel is the baser offshoot. In founding the University of Virginia, Jefferson himself laid great stress upon pride of character, dread of disgrace and humiliation. Professor Thornton, in his admirable discussions, shows that five unique influences have made this scheme successful. First, the architectural arrangement of the dormitories, each room opening directly onto a long piazza, which was also a walk around the quadrangle, so that espionage was almost impossible. Second, a strong sentiment that testimony from students must be voluntary. Third, unlimited freedom of students in selecting their own residence and courses. Fourth, the mildness of the penal codes, which forbade the faculty to expel the students save for dueling or to suspend them save for contumacy or disorder, and which had otherwise only the power to reprove. Fifth, the reference of all minor matters to a board of six student censors named by the faculty who should investigate and report the findings and the penalties. This was revolutionary eighty-six years ago, when college discipline elsewhere was severe. Soon after the University opened, as might be expected, there was an open conflict between professors and students, with much rioting. The faculty were helpless and appealed to the visitors, who appealed to the honor of the student body, who responded, and peace followed for a time. The faculty found by bitter experience that the "stricter the laws the more numerous their infractions, and the sterner the discipline, the more rebellious the subjects," so that these hot-headed young Southerners became defiant, challenged the faculty, and sympathized with misdoing. Examination papers were submitted not even in the handwriting of the student. This misrule culminated in 1840 with the murder of the chairman of the faculty. This brought horror and indignation and a reaction. The better students came forward, and in 1842 a resolution was passed that henceforth to all written examinations

each candidate attach a statement that he had not given, to which later was added nor received, help. This became the magna charta of the University. The honor pledge is rarely broken, and if it is, the students deal with it in a very summary way. Each department was organized with its officers to constitute an honor committee, with no faculty representation. The offending student is asked to leave the University, though if he wishes a public trial he may appeal to five alumni; but the guilty student rarely makes this appeal. Men have been expelled here for plagiarism, lying, cheating at cards, refusing to pay honest debts, insolence to ladies. Curiously enough, this honor code refuses to take notice of drunkenness, injuring property, gambling, betting, incontinence, cutting lectures, or idleness. Expulsion brings a stigma which a man can rarely live down at home or abroad. The students consider that the honor of their class is at stake. They hold that the honor of the class is in the keeping of each member of it.

The honor system in South Carolina has a yet longer history but has less influence. When it was established in 1805, one regulation of government was "the rewards and punishments of this institution shall be addressed to the sense of duty, to the principle of honor and shame." Twenty years later, President Cooper remonstrated with the trustees, who wished to make the discipline stricter, that the spirit of mildness and remonstrance and treating the students as gentlemen worthy of confidence "had succeeded so well that the faculty had no good reason to change it." As early as 1836, the following method of procedure was adopted. If there was a strong presumption that a student was guilty, he was summoned before the faculty to answer yes or no, but need not incriminate any other. If he said no, that was accepted as *prima facie* evidence of innocence, but if it appeared later that he had told a falsehood, he was expelled for lying. These students, though a little turbulent and high spirited, will not tolerate dishonesty in their mates. Anyone suspected may be asked, "Did you have anything to do with the affair?" and his yes or no is accepted. The college to-day "has supreme regard to the protection of the honor of the student and of the college."

Other colleges having an honor system may be divided into two groups. In one, the honor board has no representative of the faculty and acts independently of it and of the president; in the other, the faculty are represented. At least twenty-three colleges belong to the first group. At Princeton, e. g., the honor committee is composed of the presidents of the four classes with an added member from the two higher classes, six in all. The recommendations of this committee to the faculty are usually carried out, even recommendations for expulsions. Vanderbilt has an honor committee elected by the students but with no authority given it by the faculty. If a student is guilty of cheating he usually leaves the institution without appeal. Tulane has an academic board comprising the presidents, vice-presidents, and secretaries of each class which report their

findings and recommendations to the faculty; and they are usually sustained. These are typical. At Lawrence College, Wisconsin, there is a council of four seniors, three juniors, two sophomores, and one freshman, with the president of the university club, of the Y. M. C. A., and the Y. W. C. A., which acts on all cases reported and regulates dormitory affairs. In the University of Mississippi a council of honor of fifteen members represents all departments. At the University of Georgia members are elected from the classes. The member who has served the longest in the board presides. There are secret sessions and a jury in cases of cheating. A defendant may conduct his own case or employ a lawyer. The faculty constitute a court of appeal. Beloit has an honor committee of nine students. In Washington and Lee there is a committee of nine elected by the students which acts as a grand jury, formulates charges, directs a formal trial before a jury of students which they select and which has power to act. Appeal to the faculty is possible but rare. At the Wharton School of Finance and Commerce, Pennsylvania, there is a similar system which applies only to examinations and only for the first year. At Washington and Jefferson College there is a system with a detailed constitution with power to dismiss, subject to the faculty if the appeal is taken to them.

Somewhat different from these are statements that involve a pledge, like that of Simmons College for girls, which requires a statement at the end of examinations that no help was given or received. Amherst requires the declaration on all written examinations, essays, and orations: "I pledge my honor that I have neither given nor received aid." Violations are dealt with by a committee of six, the presidents of each of the four classes and one other junior and senior. The students of the University of North Carolina sign a similar pledge enforced by a university council, who may dismiss the student. The University of Cincinnati has a system of student government with a committee elected at large. Their duty is to investigate complaints, judge of the penalty and recommend it to the president, who usually carries it out. Cornell has a scheme of student control rather than an honor system in three of its colleges. Students may vote each year whether they will adopt the articles or not. The student guilty a second time is notified to leave the University within five days. If he does not do so, the case is reported to the faculty.

In the above and in a number of other colleges the honor boards are composed entirely of students voluntarily chosen from the student body. The type in which the faculty are represented we see, e. g., in Hampden-Sidney, where the president of the college calls the council and brings matters to its attention. In the Pacific University, Oregon, the council considers all matters of student conduct. This council is composed of four students elected by the student body at large and three members of the faculty appointed by the president. A similar organization regulates athletics, intercollegiate debating, and oratory. This scheme is now in its seventh year. At

Wesleyan the honor system involves signing a pledge with a report of violations to the president, who appoints a student committee to investigate and report their findings and recommendations. For sixteen years there has been a conference committee of faculty and students, in which all the college organizations are represented.

In Oberlin, while there is no formal organized honor system, the faculty and president are aided by two organizations for conference, one for men and one for women. In Trinity, there is a self-perpetuating senior honor society of seven or eight members which is a medium of communication between students and faculty in all matters of common interest. At Brown, while all responsibility as to honesty in college work is laid on the faculty, conduct in athletics is laid on the athletic board of the students elected from the three upper classes. At Bryn Mawr there is a self-government association regulating the conduct of students outside the classroom, of which every student is *ipso facto* a member, but the proctor system is relied on in classrooms and in examinations. Many institutions rely, as their catalogues state, largely on the sense of honor of the student without any definite organization. The student is invoked to meet the faculty with candor. There is a distinct understanding "that the students are responsible to keep up the moral tone" or traditional high standard of college men in honor, manliness, self-respect, consideration for the rights of others, etc. Boston University depends upon "a fair but not too paternal oversight" and a wholesome public opinion among the students. The University of Montana reports a high standard of honor which is carefully guarded and protected and especially affects athletics.

The larger number of American colleges, nevertheless, are still governed essentially by faculty supervision. In several of these the honor system is reported to have been tried and broken down or been outvoted. Monitors and proctors are used. The faculty assumes all responsibility. Various representatives from such colleges report, however, dissatisfaction with existing conditions. Often classes request an honor system which has been tried for a time. At Dartmouth the students have twice discussed it, but each time decided that, however good it might be theoretically, it was not advisable practically. In a few cases the authorities of the college want it, but the students do not.

Let us listen to its critics. The Dean of Wabash College writes: "Personally, I have been opposed to trying the scheme as I have never felt that it was desirable to turn over to inexperienced students the management or any other part of the college which is usually so

trying to members of the faculty, even after many years of service." President C. F. Thwing¹ while admitting that student self-government has lessened the antagonism between faculty and students, and has made an end of the old *in loco parentis* ideals of government, thinks love of novelty gives much of its charm to student autonomy. He holds that the machinery used is often "heavy and cumbersome and the process of its working laborious. Where self-government by students seems to be wise and easy the process is gained quite as readily by the efforts of the faculty, and in colleges in which governing is complicated the difficulty does not seem to be removed through its transfer to the students." The President of a Connecticut institution thinks a good many things may be dealt with advantageously by conferring with the students. But he says, "Of course I should be very far from approving any system by which the government of a college was in any sense turned over to undergraduates. This is and must be vested in the faculty and the faculty must show themselves competent to enforce the law by penalty when necessary. Professor L. B. R. Briggs, long Dean of Harvard College, in an article on college honor in the *Atlantic Monthly*, 1901, vol. 88, pp. 483-488, objects to the honor system "as nursing a false sensitiveness that resents the kind of supervision which everybody must sooner or later accept and as taking from the degree some part of its sanction." The Secretary of Harvard College writes: "The so-called honor system has never commended itself to either the faculty or the students of Harvard College sufficiently to procure a trial of the system here. In the first place, it is evident that in any large and heterogeneous body of students such as is to be found in any large university there would inevitably be found a small number of persons whose honor is not to be trusted under any system. To Harvard students the responsibility for detecting and punishing the offenses of this small number would be wholly unwelcome. They regard the function of the college officers in supervising examinations as inoffensive and as a valuable guarantee of the integrity and fairness with which examinations are conducted. Moreover, it is believed that under a system which encourages students to believe that a signed statement at the end of their examination papers to the effect that they have not cheated puts them any more upon their honor than they would otherwise be is not calculated to produce a really fine sense of what honor is. Precautions taken by a university to insure the integrity of the examinations, like the precautions taken by a bank to secure their safety in cashing checks for the public, are valued by all honest men and are obnoxious only to evil doers. The presence of a proctor in an examination room not only tends to prevent cheating but it enables honest students to make legitimate communications—such

¹ History of Higher Education in America, N. Y., D. Appleton & Co., 1906, 501 p.

as borrowing a pencil, asking time—without the appearance of evil, a thing which all honest men wish to avoid."

Thus it would seem that most institutions that have tried either the honor or self-government scheme, approve them, and this would indicate that it might be indefinitely extended. It must, however, be carefully adjusted to individual colleges and localities. No scheme will be found that every student will support. The spirit of honor should always be appealed to rather than detailed law; and the reputation of the institution should be involved. The system should have the hearty confidence and support of both faculty and students, and should not be a compromise measure. Its beginning, at least, and probably its working will largely depend upon some personality; and discretion and patience will be needed for all.

One of the great but rarely mentioned advantages of college self-government, especially where the faculty is represented on the student board of control, is the interchange of ideas, not only on the points involved, but in the larger field of intercourse generally between students and professors whereby each learns much about the other. It enables instructors to understand and appreciate not only the students' points of view, but is a good school to teach them the nature of youth, while the latter learn by contagion from their elders to take larger views of college and of life. Better yet, and where the faculty are not represented and are not even a higher court of appeal, student self-government enables upper classmen and women to influence and educate the lower classes. Much of this kind of work must always be going on as the student classes come and go if any system is to succeed. Class and even department barriers are broken down and also fruitful topics of conversation take the place of trivialities that often mark the social intercourse of students. This is well shown in institutions for girls as well as for boys. Even the *questionnaires* which have been answered on this subject by many students for various inquiries have been helpful, clearing the moral air and attracting serious thought on questionable habits and defining ideals of conduct.

From this brief survey a few things are plain. First, no such scheme has to-day any perceptible influence against

licentiousness, although chastity was the chief thing that true honor was meant by nature to safeguard. These codes rarely make any attempt to touch it save indirectly, and if they do so by direct means they fail. No student will betray lapses of his mates in this field. This even physicians and the confessionals conceal as if it were a sacred secret, and no spotter, tell-tale, or detective here would long survive the general opprobrium that all, even most of the purest, would mete out to him. The very nature of this vice is secrecy. The social penalties visited upon exposure are so severe that betrayal is rare, and few would be false in this respect even to their worst enemies. The same is true, though to a less extent, of drunkenness, and perhaps somewhat less yet of gambling and plagiarism. Thus the worst evils to which sedentary student life is exposed are and always have been little affected by all the devices that make students responsible for their own and each other's conduct.

Secondly, the best results are obtained against cribbing and cheating in examinations. Here student sentiment may be, and very often has been, so strongly enlisted that youth will expose their own companions, and public sentiment has often enforced expulsion with disgrace for this cause alone. This is partly because the honest suffer by relatively lowered standing in all competition tests where fraud occurs. Stealing rank in scholarship thus is easily rendered unpopular and reduced to a minimum by rightly directing and placing responsibility upon the student body. This is really the chief triumph of the system, broadly considered. Now, while I am very far from condoning this form of dishonesty, two remarks are pertinent. First, the best examinations are those that render all dishonorable modes of helping self or others impossible. Where mere memory is tested this kind of fraud is easiest. I have long held that at least in my own subjects I can give the most effective test without preventing the student from free access to all other helps that his own most ingenious devices and assistance of others can render. This, at any rate, is the ideal goal of all examinations that test power, rather than the mere acquisition of knowledge, which all admit is the desideratum. The second remark is that life, e. g., in the practice of every learned profession and of teaching, admits all the helps

of the kind tabooed as fraudulent in examinations. The clergyman, lawyer, doctor, engineer, professor, prepare with all available notes and special resources for the exercises of their own peculiar functions, success in which is the test the world imposes. For these reasons, examination honesty is always felt deeply in the unconscious soul of the student to be more or less a school-made artifact. Thus, while I grant that a genuine sense of honor may be cultivated toward such exercises, it is not the purest type in the best field of this noble sentiment. It is not wholly intrinsic, but when psychologically analyzed is found to rest partly upon loyalty to classmates, toward whom they must play fair, and partly toward the teachers and the institution. In and for itself alone, all aid in examinations will never be felt to be utterly disgraceful, but to contain more or less of a conventional element. Again, many if not most students who ever cheated feel in their souls that a test does not measure their real ability, and possibly not even their real diligence or training; at any rate, it does not gauge the real standing they will take in the world. I know the delicacy of this subject and do not underestimate the value and necessity of honest examinations nor the great value of what has been done here to develop honor, but I emphasize the fact that all that has been accomplished here is only the beginning of what is needed to purify student life and to give self-control to the best elements of the soul.

A third result of this survey of student self-regulation is that the best effects in academic grades are seen where self-control has been a slow and spontaneous growth. The impulse to evolve this function comes from a certain ripeness to exercise it, indeed, sometimes comes as a reaction from experiences of the period of laxity and lawlessness. As students grow mature enough to govern themselves, they grow averse to the authority of adults, however subtle its forms. In nothing does the unwritten tradition, custom, spirit, moral tone of one college differ quite so much from that of another. These are as diverse, indeed, as the professional rules of medicine, which has its own ethical code, of labor organizations which have another, of lawyers, journalists and teachers, which are more unformulated, and of the army and military schools, which are most highly evolved of all (witness the stories of Nathan

Hale, Samuel Davis, Major Wirz, the Dreyfus case and many a noble tale from regulars down, and of those who have preferred death to treason). In all Teutonic lands to-day the soldier must sometimes choose between violating the civil code, which forbids dueling, or perpetual disgrace and social outlawry. All these codes are a product of slow and spontaneous growth. With students, close watching challenges to deception, so that its very appearance is carefully avoided, e. g., at the University of Virginia, whereas conversely, as Woodrow Wilson says: "The truthfulness of men trusted grows with the trust." In some institutions, especially in the South, where the sentiment of honor is a more potent force than in Northern institutions, no matter how strong the evidence against the accused student, if it is circumstantial, he is asked to answer with a simple yes or no, and this answer is accepted as *prima facie* final and stands, unless certainty later shows it to be a lie. With too strict supervision, lying to the faculty may become a licensed form of flouting and ridiculing their authority. Brown University leaves even athletics to student control and its spirit ought to reinforce self-government and honor as does the military spirit. Unfortunately, here the tone that enforces clean sport has not yet been established, so that intercollegiate games can be very rarely intrusted with safety entirely to students. Experience in this field, therefore, to-day warrants impeachment of student capacity to govern themselves according to the highest ethical standards. If they cannot control their own games aright the question is inevitable and challenging whether they can be trusted in other matters.

Fourth, the evidence from student clubs of all kinds and from secret fraternities is not entirely reassuring. True, boarding, debating, literary, dramatic and many other organizations have been created and well managed by students with no supervision, but in the conduct of these there has often been extravagance, and many of them have failed. In the strongest of them the cohesion and loyalty of the brethren to each other proves often far stronger than fidelity to the interests of the institution if conflict arises. Few would implicate a fellow member in any offense against the college. "Blood is thicker than water," said one culprit. "I had to lie or give

over a bosom friend to the public disgrace of expulsion. I would have hardly done it for any other fellow." Thus fraternity, e. g., in a secret society, shields evil doers. Even the matriculation pledge not to cheat which many colleges compel all students to sign on entering, is made void and the excuse that a coerced oath, perhaps from a non-juring conscience, is not binding is natural and easy, and upper classmen who always predominate on the honor committee and who would act justly toward a lower classman have sometimes failed when a chum is concerned, just as the bonds of friendship in later life often prove too strong for the laws of church or state.

It is often said that while under a government that limits freedom in so many points to the adult as does the German state, academic youth have some excuse in abusing their liberty during the academic years, here in a democracy there can be no such pretext and liberty should be no greater than it will be found to be in subsequent life. This view, however, is partial, if not specious. Collegians here are not only suddenly freed from home and high-school restraints, but enjoy a leisure that will come to very few of them indeed again, for industry and business involve constraints often hardly less than servitude, so that the academic quadrennium is the heyday of personal liberty. Here, as well as in other lands, where the moral experience that comes from doing as one pleases is gained because repression even from self-control is escape, one who has not let himself go within certain rather generous yet exceptional limits when the spontaneous abilities are at their very best, lacks self-knowledge, for he has never seen himself completely deployed in action and does not learn the true inner motivation of self-rule. There is a wholesome abandon in letting oneself out a trifle, not only to unlimber powers that might otherwise slumber through life, but to learn from personal acquaintance something of "the immortal powers."

Pedagogy of Juvenile Crime.—Children obey their impulses and most of their misdemeanors are more mischievous than vicious, and hence they are very prone at a certain stage to commit acts which the law condemns, without the slightest criminal intent. Police systems usually show leniency by

ignoring most acts and selecting extreme ones for warning treatment. The playground with its outlet for physical and psychic energy has distinctly mitigated juvenile crime. Moderate poverty is usually a good school for industry, foresight, and self-control. For the Juvenile Court to take a child from its family has been compared to dynamiting a building to check a spreading fire; and yet environment is vastly more important in many cases than heredity, for almost always when a child is settled in a good home by the age of ten, he lives out his life on or near its level, whatever his previous ancestry. Moreover, abnormal conditions in the environment are often easily discoverable and removable in each case; and luminous, too, are the now voluminous tabulated reports upon the effects of nationality, conjugal relation, occupation, hard times, drinking, poverty, disease, orphanage, bad hygiene, etc. Rarely ever is any one of these influences dissociated from several, and perhaps all of them contribute.¹

The Boston law of 1906 was partly due to the fact that, in the language of the Police Commissioner, "the tide of juvenile delinquency is rising in Boston, and almost daily there is a new high-water mark." This law raised from twelve to fourteen the age under which children can be committed to the police station, prison, or State Farm, in default of bail, for non-payment of a fine, or any offense not punishable by death or life imprisonment. Children must not be called or treated as criminals under seventeen. Thus juvenile delinquency and waywardness are conditions, not offenses. Children cannot be convicted. Good conduct is assured not by penalties inflicted, but by the certainty that they will follow offenses after assignment to the probation officer. Under this law parents may be held responsible for not having withdrawn their children from criminal associates or for permitting truancy. Where trials occur, the case is gone into at great length, lasting perhaps hours instead of being disposed of in a few minutes. Reparation plays a large rôle; and sincere regret and

¹ M. C. Rhoades: *A Case Study of Delinquent Boys in the Juvenile Court of Chicago*. Amer. Jour. of Soc., July, 1907, vol. 13, pp. 56-78. See also *Administration and Educational Work of American Juvenile Reform Schools*, by David S. Snedden. Published by Teachers' College, Columbia University, N. Y., 1907, 206 p.

even apology and restoration of property after petty larceny are considered.

After a struggle of centuries, the child is now a legal person with a status and with rights that can be enforced by law if necessary, against even its own parents. Not only do children no longer belong to their parents, in the sense of the old Roman *patria potestas*, which gave to the father even the power of life and death; but the modern court can compel the parents to exercise all the elementary functions of providing shelter, clothing, food, and schooling, can prevent them from forcing their children into gainful pursuits that involve jeopardy to health or morals. Officers of the State assume coguardianship, and offspring can even be removed from home at any age. The children belong to the State quite as much, if not more, than they belong to the parents. Giving birth and suck do not of themselves involve ownership, or give the right to impair any of the fundamental conditions of well-being. Thus the State assumes larger duties than ever before toward the child. It must see a candidate for good citizenship in every vagrant street Arab, incipient criminal, or invalid. For this large function, we are only in the reconnoitering stage, and are not yet quite prepared to formulate a detailed plan or a practical campaign. This must be prepared with a view not only to the welfare and maturity of those already born, but with regard to future generations.

It must be confessed that the Juvenile Court has not increased but rather declined in favor in this country within very recent years. The laws under which it was established differ widely in different States. In some it is constituted as a regular criminal court under Common Law. The indictment is drawn as the State *vs.* Johnnie or Mollie; there is a jury, trial with counsel, bailing out, *habeas corpus*, sentence, appeals, etc. It is impossible, however, to do the best for boys under such a system; and hence it comes that so many decisions of the juvenile are reversed by higher courts, so that the professional standing of the judges in the former is jeopardized, and perhaps permanently impaired—all through no fault of their own, but because of the anomalous position of a court based partly on Equity and partly on Common Law. As against this, in all such courts the equity principle should be made

supreme, as it is beginning to be in a few State laws. This means that the judge can exercise his sound common sense in each case. He can not only exclude other boys, the public and the press from the trial so that those brought before him may be shielded from both publicity and notoriety as is usually done, but has almost unlimited discretion to vary his treatment to fit individual needs. The issue is between mechanical uniformity on the one hand with incessant reference to precedence, and indefinite power to adjust to personalities on the other. It is the boy *versus* the system. The success of every such court, not only does, but always must depend very largely upon the personality of the judge himself, although it is hard for the legal mind to escape dominance of the ideal of a system, which any person can administer. It is plain, therefore, that we are far from having solved the problem of how to treat young delinquents. If we look solely at the offender some scheme of parole, probation, or guardianship is clearly best. But, on the other hand, if a boy slightly tainted is, under the system, allowed to be at large, he often infects other boys with whatever degree of viciousness he has developed. Hence we have two ideals in this country—one that regards the boy and aims chiefly at his salvation, as represented by Judge Lindsey; and the other that looks first at the good of the greater number of boys who are in danger of moral infection unless those in whom the evil is smoldering be isolated from them, and whose interests may in some cases be best safeguarded if he is shut up. Again, age limits of responsibility, as established by law, are very wooden and noxious. A girl of fifteen, e. g., may be so wholly depraved as to demoralize a wide circle of boys and girls, being herself, it may be, steeped in vice and really old in its practice; but, if the age of consent where she lives is sixteen, a young man whom she misleads for the first time, although he be relatively innocent, may suffer the severe penalty of being her corrupter and she go scott free, when if a year older she would bear all the penalty. The equity judge should look solely at the merits of the individual case and not be influenced by the superficial, arbitrary categorizations of classes of crimes and punishment, and should be emancipated from the letter of the law which may so easily work great injustice.

The best juvenile court would be one that could be held anywhere, at any time, where the judge was, and as occasion arose. It should be a court, we may add, that if it were ideal and had accomplished its end, would never be held anywhere. But its agencies would be devoted to preventive work, which would be so effective as to eliminate occasion for trials. My ideal would be something like this: Let the judge and his helpers, including probation and truant officers, when appointed in a community, first visit the schools, churches, boys' and girls' clubs, and tell the children concisely the substance of each city ordinance and law which pertained to them and which they might break unwittingly. Let them tell the reasons for everything the law prescribes and the end it was intended to accomplish, and point out ways in which it might be accidentally violated, and add the details of the methods of procedure: arrest, trial, disposition of the various classes of cases—all this could be done in a way to enlist the understanding and even the sympathy of every normal boy in the upper grammar grades in a way that would affect his attitude toward law throughout his subsequent life. This kind of moral teaching by extreme examples of dereliction is just what not only interests the boys' liking for adventure, but vents it on the principle of the Aristotelian catharsis, so that they are more immune from temptation and also better informed. This might be done two or three times a year, briefly and concisely, as a concrete lesson in morals and in civic duty. If these inculcations were enriched with examples and made a kind of clinic for juveniles, there is not the slightest danger, as old women of both sexes are prone to imagine, of infection unless the teacher is ignorant of the first principles of pedagogy and of insight and tact in dealing with children. Properly told, about every kind of wrongdoing may be described in a way to deeply impress and to deter. In the next place, each teacher or principal should keep a notebook with a ledger page for each child, entering its good and bad traits and acts. When it appeared from the record and observations that a boy or girl was drifting into moral danger, whether by the development of an innate tendency or by outer circumstances and associations, or home conditions, and if the teacher or principal are not satisfied with what they are able to do in the case, then the

juvenile judge or his officers should be invoked and each critical case turned over to him for such moral treatment as he deemed best after investigation. The fact that the boy knew, although no others did, that he was under guardianship and could be taken into custody, would make preventive measures effective; and the overt criminal act to which the boy was tending might be avoided. Thus in every school there might be a few clinical cases under the joint observation of teacher and moral officer. And the same help might be rendered by the latter to children from homes and even Sunday schools, etc. In this way outside the school, home, and church, there would be constituted an agency to deal with exceptional children and youth before the age of full legal liability whom teachers and parents failed adequately to reach, and who might otherwise drift on toward criminality. Normal moral children would know thus something about juvenile delinquency—how it was treated and regarded and why, its place in the civic organization under which they lived, as an intellectual matter; while those with wayward proclivities would know restraining agencies more intimately, having passed through one or more of the grades of correction: friendly advice, aid, warning, reproof, supervision, probation with duty to report at stated intervals, and hence feel the progressive surveillance and restriction of liberty which might lead on to residence in reformatory institutions of various grades according to the degree of defect, and the need of the apparatus of moral orthopedics.

Why is not some such institution as needed and as practical as a department of hygiene, which abates nuisances, disinfects dumps, and removes dangerous patients? Its officers could develop many accessory functions, such as modes of tabulating all kinds of information, that experience might be utilized to the uttermost; more frequent consultations concerning very problematical children in the grades, as physicians consult in critical cases; modes of investigating the moral surroundings; methods of keeping tab, without overt espionage, upon boys and girls whose temptations to go wrong were increasing; admonishing negligent parents; finding volunteer guardians whose aid could be invoked for special children. They could also develop to a considerable extent such moral lessons as

might be given to schools based upon the legal requirements and the infraction of laws. It would, of course, be essential that in this group of officials should be vested the power to penalize rather severely; and that they should, upon extreme occasions, exercise this power relentlessly and without appeal. There is in nearly every boy community a small group of toughs who presume ostentatiously, if not defiantly, upon the tenderness of their elders and also upon the mildness of penalties, very clearly understanding that they can sin with relative impunity up to a certain age, at the moment of attaining which this is replaced by severe penalties. These age nodes should all be graded away, so that punishment should grow steadily and *pari passu* with inner responsibility. The penal code should be the magna charta of offenders, and its administration should be so just that the boy who is punished should never feel that others more guilty than he escaped; for this implants a deep sense of enmity against the law generally, if not against society itself. The sense of justice, innate in every boy, is the very best foundation upon which to build the whole fabric of moral education. Its possibilities are now wastefully neglected because unknown, because they have been so overbalanced by excessive kindness, mercy, and indulgence. It is easy and lazy morality to forgive everything; but to act justly requires a far higher quality of both mind and will.

Judge Willis Brown, next to Judge Lindsey, one of the most suggestive workers in this field, makes the helpful suggestion that in one or more schools in a city, moral instruction of a special and intensive kind be provided, and that children from all other schools who are in moral jeopardy or have truant or other dangerous proclivities be sent there. He would also have the boys in each school district organized as a city ward: hold stated meetings, elect officers, discuss such local civic and moral questions as they or their advisers deem well. This plan would bring certain of the best features of the George Junior Republic, Boy City, and Boys' Clubs into the schools. There could be a system of cities within a city, if each school were organized into a municipality, where questions of interest to both ward and city were discussed and acted on in a moot way as they arose. Moral betterment should be the goal.

Now, in connection with this system, if each boy who should profit thereby were placed under some worthy man who lived near by and who could occasionally meet him, based on friendship and mutual help, in ways each pair could work out, there might be great gain. In many of the best lands and periods of history boys have had, besides their parents, some mentor, godfather, guardian, or advisor with avuncular or uncle functions; and good has thereby come to both parties. Upon unmarried young men especially, some such responsibility toward one or more boys might be made a part of civic and social duty, as in the best days of Greece, where this system was so developed that it was a disgrace to a boy not to have some older male friend, protector or counselor. That later in a degenerate age this relation often became corrupt should not intimidate us from learning again to utilize all the good that might be attained by such quasi-paternal relations as all mature men, whether fathers or not, ought for their own psychic development to exercise toward boys. Even the fag as well as the tutorial system was only another expression of this form of mutualism between older and younger men. Beginning with boys needing exceptional care, the scheme might be extended indefinitely to others. Whereas the juvenile judge with a genius for his work, like Lindsey, might thus befriend many boys in need, there are very many young men in every community who might assume more or less the care of one boy, and be themselves matured and morally strengthened by it. Aspects of this mentorship seem slowly developing in the Y. M. C. A., the Epworth League, the Big Brothers' movement, and some other religious organizations. Plato deemed it one of the strongest of all incentives to virtue in these guardians that they felt that they must always set good examples to their charges and never let the latter detect faults in their character or conduct. As a foreschool for fatherly interests thus it would be beneficent. While for boys in the early teens, and even before, from the time when lads cease to be interested solely in mates of their own age and begin to long and tiptoe up toward adult companionship, and love above all things to be talked to as if they were themselves grown up, when they begin to recognize the existence of great questions above them, or grapple with the problem of how to

earn a livelihood, and what vocation to choose, it would seem almost as if they had a sacred and inalienable right in our modern communities to be placed in frank, confidential relations with some man in addition to their father. Here we might realize again the almost lost ideals of antiquity, as expressed by Aristotle and Cicero, which romantic love has thrown into the background.

What immeasurable good, too, might come of such relationships between mature women and girls during the most critical period of their development, who are sorely in need of counsel which they hesitate to seek from their mothers? Social workers are beginning to realize this and might develop still further a system of auxiliary helpers, mothers' assistants or coadjutors, and enlist an efficient corps of first aiders for those in moral danger, who would grow themselves for their care into more wholesome, richer, and all-rounded womanhood, and be more insightful mothers later. Surely every girl, especially in the city, as she begins to bloom into womanhood ought to have a foster parent or shepherd of her soul.

Strange to say, there is no provision made at any university in the world for training juvenile judges, probation or truant officers. A lawyer or judge, already familiar with adult and Common Law cases, is usually by this experience peculiarly unfitted to deal with children. Vested with great discretionary powers, even to take the young from their parents from early infancy on, and place them wherever he deems best; able to fine and even imprison parents for neglect, cruelty, overwork, etc., he is a rare man who can at the same time win, as he needs to, the confidence of both parents and children, so that the former will consult him as to the home discipline or the disposition of their own problematic boys and girls, and the latter will confess everything to him as a friend, upon his assurance that he will not use it against them or their pals but will forget it in his judicial capacity. Yet this ideal seems to be almost attained by a very few. The keynote here influencing boys tending to criminality is justice. They respond to the very words "fair play," "on the square," "on the level," "an honest game," etc. A man with his mind charged with incidents of boys in moral peril, who have gone wrong, or been barely kept straight, who brings news from the fighting line where so many go down to moral death, who has genuine sympathy with boys, can influence them as pedagogy cannot begin to do. With these two equipments—sympathy and a wide concrete knowledge—such a man incidentally becomes the captain of boys, their gang leader, their hero or example, somewhat as the dog under

domestication left the wild pack and transferred his devotion from it to his human master.

Next, I would have the school, the church, and all the houses of detention utilize to the uttermost these born pederasts as inspirers of virtue as well as deterrers from evil. Yet, while it is an inspiration to adults even to see these boy soul-compellers lead their flock about as the Pied Piper did the children and the very rats, they are prone, I think, even the best of them, to fall into diverse affectations; and because of their very power they often try to attempt if not the impossible at least the unnatural, so that when their influence is withdrawn, a dangerous reaction may set in. Some of these adult boy leaders, e. g., are overpictistic and seek to inoculate other-worldness at an age when a boy wants and needs to be most absorbed in this world. The Jesus as the church represents Him is not a natural object of devotion to the natural boy of twelve, and another life seems very unreal compared with this. Hence clever ways of smuggling in transcendental persons and influences, that we often see, are not the soundest pedagogy. To say, e. g., "You are not giving Jesus a square deal if you cheat, lie, steal, etc., because He came down and suffered and died for us"—may be led up to in a way to produce considerable immediate effect upon a susceptible youth; but there is something essentially foreign to boy nature in all this, and so it wears away, and the only permanent effect that results therefrom is often that the soul is rendered a little callous and immune to the infection of real religion when its time comes. So, too, such a mentor's collection of illustrative cases of virtue and vice may both be so extreme and exceptional and so far outside the boy's experience that, while their recital impresses at the time, he does not meet their like in his daily life and so their moral fails; or at best it all remains foreign and is not knit up into the texture of his most frequent thoughts and acts. Much of the subject matter of talks to boys is of goodness so very exotic and of badness so heinous that it remains in the soul as something rather foreign, like book talk or preaching.

I would have moral instruction in the schools include at least a glimpse at the many interesting problems of juvenile

delinquency in each city where a good social survey has been made in this field.

For instance, in the city of Worcester, Mass.¹ A. H. N. Baron² showed that in the preceding five years, out of nearly 1,500 cases of boys and girls who had in some way come in connection with the court, about one half were cases of stubbornness; and that of these most complaints were made by parents who, as the records show, did not know how to deal with their children. In other words, their parenthood was incompetent when the children reached the teens. Next came larceny with breaking and entering, thefts being mostly of articles of food and next of dress, though, in the winter, of coal; and where money, or material that could be disposed of to raise it in pawn and junk shops, was stolen, it was in many cases to buy cigarettes with. What the law calls "malevolent mischief" is a very varied list of tricks, due often to exuberant animal spirits but sometimes dangerous tampering with railroad signals, false fire alarms, and practical jokes. The "violation of Lord's day" is mainly by playing ball and cards. Trespass seems mostly to have been either playfulness or to have a hunkey or hang-out for a club. Vagrants are usually strangers who had stolen rides on trains. Other legal rubrics are: obstructing passage, throwing stones on the street, disturbing the peace, assault and battery, cruelty to animals, walking on the railroad track, peddling without a license.

All such classifications are not by motives. They do not consider the ordinance was violated by imitation, by special temptation, by playfulness, ignorance, or other motives; but the standards are objective and wooden.

As to treatment of the various cases, nearly one fourth were fined. The fine naturally falls chiefly upon the parent and is essentially a bad system. Wherever there are enough good probation officers, and the probation system is the keystone of the arch in dealing with juveniles, fines are almost eliminated as are cases of second or third arrests, which here constitute about one third of all. Perhaps some who have been under surveillance are suspected unjustly afterwards for that reason. It is not quite clear whether such a system as prevails in Buffalo with a good corps of expert probation officers, who follow up all who have been brought to the attention of the court and released on parole or probation, or with suspended sentence, is better than the system of one paid chief probation officer who among business men finds sponsors who will take one or more cases to look after. Juvenile cases should certainly be tried every day and not once a week as here, especially as the older boys are shut up between the arrest and trial. All the years taken cognizance

¹ Population 130,000.

² In a Master's Thesis, *Juvenile Delinquency in Worcester, Mass.* Clark University, June, 1906, 33 p.

of here are between seven and seventeen; the age fourteen halves the cases, there being as many before as after, and the last year being the worst. It would seem that better arrangements would make it necessary to send less members to truant schools and especially to the Lyman School, which shows excellent records for those who have been there, but probably in part because many were sent who should not have been.

Now my point is that these facts and the process of arrest, trial, etc., should be briefly described to all boys before leaving the Grammar School, if not indeed earlier, for several reasons: (a) the law does not accept ignorance as an excuse and quite a number of arrests occur every year of innocent boys whose violation was unwitting. Moreover, (b) the natural interest of boys in those who go wrong and the utilization of the lessons that come from this knowledge does much to clear up the concrete mind of a boy in regard, if not to moral questions, to what the community permits and what it does not permit. I see no reason why all boys should not be interested and should not be told a little about the Juvenile Court, the indeterminate sentence, the probation system, etc.

Hans Kurella¹ gives an admirable summary of Lombroso's theory, the kernel of which is perhaps his estimate that forty per cent of criminals are a special variety of the human race, to whom atavism has given unique physical and psychic processes. This means that their tendencies are innate and inherited, and that they have certain traits that make their type more or less unitary. Lombroso expends great ingenuity in showing that criminals among modern cultivated people do represent survivals of conditions common in prehistoric life; and he even traces the germs of crime down to the very anatomy of the primates and even to lower animal forms. On the psychic side, too, he finds atavisms characteristic of criminals in insensitiveness to pain, tendencies to tattoo, to be left-handed, hairiness, slight difference of sexes, slight vasomotor excitability, and disvulnerability. This theory does not imply that all primitive races would be criminals. It is supported by the moral deficiency of early childhood. From this view, it by no means strictly follows that born criminals are irresponsible. Those who know criminal psychology as moral pathology will hardly make this error. He believes the epileptic and criminal diathesis similar, and that both illustrate something like moral insanity. Benedikt is perhaps his most thoroughgoing pupil and holds that very many criminals are degenerates, as does Féré. Laurent and Corre have also contributed to this theory, which Dortel and Francotte have amplified theoretically. Kurella opposes this view, although admitting the great access of interest that it has brought into this field.

¹ *Naturgeschichte des Verbrechers; Grundzüge der criminellen Anthropologie und Criminalpsychologie für Gerichtsarzte, Psychiater, Juristen und Verwaltungsbeamte.* Stuttgart, Ferdinand Enke, 1893, 284 p.

Theodor Ziehen¹ in answer to the question, By what physical or psychic symptoms do we recognize in children during their first years congenital weak-mindedness? gives a number of norms: for instance, the circumference of the skull at the end of the first month of life averages 36 centimeters; at the end of the first year 45; at the end of the second 48; of the fifth 50. He characterizes the micro- and macro-cephalic types of the cranial and other bones. Defects are matters of coördination, and to be extremely lacking in one respect some have attempted to compare with less variation in several respects. The writer then describes abnormal sensations and other physical signs of degeneration, both functionally and structurally. As for tests of intelligence, he would have them directed toward (a) memory, (b) formation of ideas, and (c) judgment or power of combination. *Merkfähigkeit* is stressed. Many children of nine or ten years cannot count higher than three or four. Number tests are very significant. As to questions, very much depends upon the form in which they are put; those requiring definitions are far harder than those that require distinctions.

E. Neter² urges that most cases of transgression of law might be dealt with by less excessive methods. The right of the state to meddle with the family should be greatly increased. The deeper cases of juvenile crime are in fields inaccessible to criminal jurisprudence and are too complex and manifold in their nature to be solved by its methods. This fact impels us to a more intensive study of causes, in order to fight the evil at its beginning. Here, just as in medicine, prophylaxis becomes increasingly more important. Care for the young people and juvenile justice are not two domains but one, and both are vital problems of education.

Otto Binswanger³ gives a history of the idea of moral insanity from the time it first began to be regarded as an independent symptom group in which criminal tendencies were dominant or irresistible. The point was to prove that such disturbances could exist without any impairment of the intellect. Later the idea of moral insanity or imbecility was more sharply defined and it was required that some serious defect of the ethical feelings and ideas should be proven from the earliest childhood. The born criminal may be the abnormal phenomenon of the social organism, perhaps a peculiar anthropological variety, but he must never be regarded as insane so long as there are no other signs of mental disease except moral defect. The criteria that enable us to decide with certainty between born criminals and moral imbeciles, both of whom have defects in their development and perhaps antisocial tendencies, is the question whether the perversion is exclusively in the moral and æsthetic domain. Only

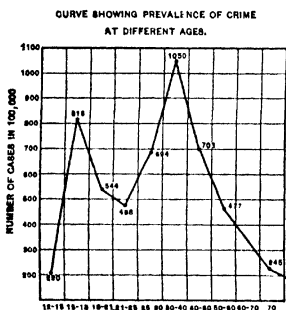
¹ Die Erkennung des Schwachsinnns im Kindesalter. Berlin, Karger, 1909, 32 p.

² Die Behandlung der straffälligen Jugend. München, Gmelin, 1908, 56 p.

³ Über den moralischen Schwachsinn, mit besonderer Berücksichtigung der kindlichen Altersstufe. Berlin, Reuther, 1905, 36 p.

when troubles of development in the intellectual sphere or other signs of a morbid change in psychic processes are found can we speak of moral insanity or imbecility. Often the abstract ethical ideas are not firmly anchored to the ego and so are not a real possession of the individual and thus cannot influence his thought and action because they do not awaken the proper feeling tone of the self.

Paul Pollitz¹ constructs the following curve of juvenile crime which he thinks typical, showing an apex at about sixteen,



as power of control and social restraint develop, with a later rise showing adult criminality.

Youth our Chief National Resource and the Need of Conserving It.—Among the demoralizing agencies, never so potent in the world as now and in this country, is immigration. Upon landing on our shores, foreign families find their dress queer and

their language treated without respect. The fact of their being aliens is a disadvantage and, to the young, perhaps a badge of contempt and derision. Their children take up our new ideas and ways first; and as the chief desire of the parents is that they become Americanized as rapidly as possible, the young lead the old and parental authority and respect for them is lost. If we revered the strangers in our country as foreigners respect American travelers coming from the better classes, all would be different. As it is, for a long period, during which often a million a year from the Old World have landed upon our shores, mostly from the ignorant and day-laboring class, the native Americans, young and old alike, have acquired a deep-down dislike if not contempt of foreigners as a class. This change and the larger industrial opportunities here con-

¹ Die Psychologie des Verbrechers; Kriminalpsychologie, Leipzig, Teubner, 1909, 148 p. Also one of the very best general treatises on the subject is G. L. Duprat's *La Criminalité dans l'Adolescence*, Paris, Alcan, 1909, 260 p.

stitute the conditions which first attracted and now hold the alien and make him wish to transform all his ways of life to the pattern set here, so that his previous habits, customs, and the social traditions that remind him of the fatherland are soon laid aside, with often religious and moral ideas as well, in order to facilitate the rapid adjustment to a new national basis. This is very hard on character. Travelers often allow themselves great ethical license in things that home restraints forbid. But for immigrants all old ties are abruptly and usually permanently sundered, and they soon become ashamed of ancient ways. The effects of transplantation have some psychological kinship to those of sudden emancipation for the negroes in this country after the war. Women, and especially the old women, are most conservative, so that this transformation is often most pathetically hard for grandmothers whose dress, speech, occupation, social and religious life are so fixed and hard to change and thus often, instead of being revered by two generations in their own household, they lose influence upon their children and are perhaps flouted by their grandchildren, who grow ashamed of their persistent old-country ways. In such cases the order of family life is inverted: the youngest lead and the oldest are in least esteem. The children translate, deal with tradesmen, bear the news, mediate between the old civilization and our own. The past seems more or less vain, if not despicable, and they grow conscious and then ashamed of its every memento. All this tends to be swept into a great maelstrom of oblivion, so that a fresh start may be made with a *tabula rasa*. Thus often we have both a social and individual regeneration or degeneration. Under this state of things, newcomers to our shores contribute nothing save their heredity and working power; and the character and diversity of ethnic tradition, so precious a factor in the amalgam being here prepared in the great smelting pot of races, tends to be lost; and the monotony of Americanism, if not Americanitis, swallows all these rich sources of diversification. As vestiges of this sort die hard, the races here tend to huddle in quarters, streets, settlements, in order to keep each other's old-fashionedness in countenance, and that reverence for their ancient ways may at least die decently with the generation that migrated.

Now this is both pathetic and wasteful. Very precious are the *ethos, nomos, muthos* and *logos* of race. They are products of very slow evolution and are the matrices in which character is molded. They fit the very strain and blood, for their psyche has been very exactly adjusted to the *soma* or to the very body and its diathesis, so that along with moral goes also mental waste and often in the next generation physical decay. Therefore, in this country we must count as very potent and beneficent all the recent efforts to conserve all the old household arts and industries which recent immigrants long to keep alive—all their family customs, tales, folklore, native myths, dances, modes of life, and even, to some extent, their customs of dress if these have no intrinsic elements of badness in them. All should make Scandinavian, Jew, German, Italian, Armenian, Teuton, and the rest aspire to be good representatives of their own stock rather than cheap imitation Americans. The Irish are now in certain respects perhaps least lacking in fatherland pride and esteem, for some of them would even revive their own ancient Gaelic tongue; but even they neglect many old industries and traditions and have turned their backs forever upon the simple ancestral ways of life as it was led at home. The same is true to a great extent of the Germans.

On a foreign shore, the newcomer should idealize all the memories of what is left behind and be proud of his stirp, should magnify all that is good in it, and keep green its best memories. All these things their children should be told reverently and thus be taught to respect their parents and what has been sacrificed in changing abodes for them. Native-born children, too, should be taught the tales and history of alien races whose offspring they meet in the schoolroom; and thus their interest and respect for their mates should be maintained. To this end each teacher should have sympathetic knowledge of the ways of life and viewpoints of the parents of each nationality represented in his or her grade. The Pole, Turk, Frenchman, Swede, who is loyal to his own land and proud of his descent, rather than the flabby, reconstructed specimen who apes all our manners at the expense of his own, makes the best American citizen because he adds something of positive value to the diversification of elements of which true Americanism

is only the higher unity. Monotonous uniformity and abnegation of traits inherited or inbred for generations is not the true American quality and is very subtly dangerous for morals. Thus pageants, festivals, every commemoration of Old-World stories, music, march, float, dramatization, helps the continuity of development crossing the Atlantic, and contributes no little to establish virtue as well as to develop the intellect and the heart. Every vitalizing new touch of our immigrants and their descendants with the spirit of their motherland helps them to appreciate the best that is here and enriches our own national life. Hence these are soul-saving agencies, the great value of which is at length going to be adequately appreciated.

The very essence of youth is moral enthusiasm. All the interests, dreams, and activities that distinguish it from the other ages of life are at bottom attempts to translate into life and conduct what the spirit of youth, to which all things are possible, really is and means; and many perish because they are not taught and cannot find out the adequate and right ways of expressing what is in them. What to do with their superfluous energy is their constant problem. They must and will enjoy, glow, and tingle with excitement in some form. If they abandon themselves to pleasure, they want all available forms and the most intense degrees of it; but the imagination which roots in sex and is one and inseparable with it is for a season plasticity itself. Youth fairly lusts for adventure of some sort and is capable of gallant, chivalric heroism. The sense of justice is exhibited, and his sympathy with the oppressed may bring him to enlist in desperate causes to punish those who outrage it. On the city streets we meet scores of eager-eyed youths and maidens who are in quest of something to do or be, who want to realize some ambition or, if not that, to get at life and feel it in all its breadth and depth and height. The very aspect of these young people not only challenges but almost smites and buffets us wiser grown-ups to do something to help them.

To-day, let it be said with the utmost emphasis and repeated over and over again, the spirit of youth is the one and only hope of this country, not to say of the world—only it can save us. If it fades, we sink into hard, grimy industrialism or ruthless commercialism or selfishness and moral material-

ism; and we shall be known to the world as the people who perished from lack of vision because youth, which means vision, was lost. Toward this most priceless of treasures our public sentiment is gross, our pedagogy purblind and helpless. Thousands of young Russians, Italians, Germans, Armenians and many more come to our shores fired with the highest instincts of reform and social regeneration. This is the promised land of their hopes, they burn with zest to make the world better; but not finding here the specific objects of endeavor they were used to at home and not being guided in making due adjustment, many of them slowly sink to apathy and indifference. Our very atmosphere of easy tolerance to all sorts of opinion and conduct is demoralizing. Perhaps they fight windmills, becoming rather absurd anarchists and atheists, not realizing that the enemies they fought at home are not found here. Full of Wertherian ferment, they lack the power of adaptation, which the refugees who came here from the German revolution of 1848 had in such a high degree and to whom this country therefore owes so much. The very spirit of unrest and disorder, which is brought from so many lands to our shores, if rightly directed, might be an agent of great good. Our land is a smelting pot of alien races, who bring here many types of nationalistic aspirations; but under our neglect and indifference, after a few years, our immigrants lose their conviction, their standards, religion, folk ways, and even the ideals and practices of their various home industries, and sink to the dull, monotonous level of acquiescence. A few of them, too mettlesome to submit to this process, despair and take refuge in suicide; but the great majority are taken possession of by the money madness which soon infects them, and find the realization of their youthful hopes only in ideals of sordid wealth, which in this country has such low and vulgar standards and which usually quite spoils the third, if not the second, generation by the slow process of degeneration that is usually at once physical, mental, and moral, which it entails.¹

* But, if the high aspirations of youth do here take on an

¹ See the admirable work by Jane Addams: *The Spirit of Youth and the City Streets*, New York, Macmillan, 1909, 162 p.

auriferous hue, let us remember that there are yet worse things. To dream of dominating the stock market for a day, of palatial houses, of buying elections and legislators, of automobiles, boxes at the theater and opera, fine raiment, luxuries, travel and ease after toil—is better than not to dream at all and is surely preferable to open profligacy. To follow the counsels of our greatest millionaires, who exhort young men to work, live simply, save, and nourish a youth sublime, in anticipation of magnificent riches in the end with all the power it brings, is vastly better than to drift and dissipate by indulging the lower propensities. But along with and far above this should surely go the passion for social righteousness which should be molded and given definite direction toward forms of amelioration and relief from industrial oppression in its countless forms—the checking of municipal corruption and corporate greed, the ruthless mania for pelf and power which grinds the life out of women and children who work, the vampires who pander to lust and debauch youth with drink, who adulterate food and even drugs, and prey upon the virtue of young girls. If religion which brought the Puritan and the cavalier—the one with his rigorous conscience and the other with his ideals of honor—is losing its pristine power, and if newcomers are prone to lose their national, social, and historic ideals beyond the hope of rescue by pageants and all the new efforts to restore and revivify their traditions, household traits, and family customs, and if even the ideals of democracy and the sublimating and magnificent concepts of self-government of the people, by the people, which brought one of the greatest sources of hope and confidence that has ever come to the human race—have ceased to be an inspiration to-day, there still remains one last resource, and that is the economic conservation, specific, practical direction, of the ardor of the youthful zest for life, by finding tasks worthy their mettle for each. This, and not any expectation of definite, divine guidance or intervention or a purblind faith in national destiny could, if stored and turned into the right channels, sweep away at short notice most of the evils and dangers that threaten youth and society, and restore the family, politics, and business to a sound basis and give tangible reality to what is now too often wasted in flitting, iridescent dreams, in sporadic and uncoördinated

efforts, in negative criticisms that condemn but cannot construct, and grow extravagant as they grow impotent.

Our great national need, then, is a new interpretation or dispensation of the higher meaning of youth, that shall make an end of its present martyrdom by monotony, high specialization of machinery and office work, by gaudy temptation flaunted in hours of relaxation, rest, and moral exhaustion. We need a theater that shall shape ideals, give standards of conduct, and preform choices, and a school curriculum that is rich in ethical interests, which is all youth really cares for, gymnasia that bring health, exercise, and excitement without exhaustion. We must take possession of the imagination during these critical years when it is nine tenths of life, must provide abundant social opportunity where the young can gratify their passion for being together in a sanifying environment; we must provide modes of exploiting for good the spirit of adventure which attracts youth in shoals from the country to the city, which is now in a stage of municipal evolution which is very dangerous for them, because we have not learned to purge our great centers of festering moral contagion. We must awaken the church and the school from their long apathy and ignorance concerning the deeper needs of the young, organize isolated agencies for helping them get together for greater effectiveness, set all, if possible, even the tainted youth, to work to rescue others, for this is often a way of salvation for them. Never was the higher pedagogy, which includes statecraft, family, school and religion, called to so high and hard a task—not in the days of Socrates, when the Athenian youth were exposed to some of the same deteriorating influences, not in the days of Fichte, who spoke to the academic youth of the Fatherland and was heard by them as no one ever was before or since.

With weakness of fecundity comes loss of a sense of what childhood and youth mean and need, and so in the face of this gigantic problem, the dimensions of which the wisest and greatest minds are now only just beginning to grasp, we have scores of partial and often trivial ways of solving the great problem of moral education enumerated above. The slightest of them are well meant and no doubt of service; but all of them together are inadequate to meet the situation to-day,

which is simply that of national survival and perpetuity in the largest and most comprehensive sense. Given the age of youthful idealism, yearnings and restless tension, charged with all that is worthy of survival from all past ages of man's phyletic history, an age when Nature dowers each of her children with their second and last great heritage of moral momentum to do, be, dare, and achieve, as if she sought to vest each individual with the most and best that ever was in the race—given these, the only thing that is of ultimate worth in the world, the most precious and supreme of all things—what shall we do with it? The way this question is answered is the best test of an age or a nation. If it aborts and runs to waste, we perish miserably, if slowly. If it has full headway, is turned on aright, it has cleansing, purifying motive power enough to run all the agencies of betterment and to regenerate even moribund lines of endeavor. It not only brings the vision without which the people perish, but gives it reality. All this is possible and is the supreme duty of the present. Those who have ears, now hear the bitter, if unconscious, cry of youth in distress for want of guidance into better things. Our material civilization does not satisfy their deepest longings. The old oracles of the church, if not dumb, are hoarse and indistinct and too often disregarded by them. Their natural guardians are, some of them, asleep at their post and dreaming of old issues for which the present has no use; others are bustling and perhaps fevered with anxiety, or putting their faith in petty and very diverse devices, which are now utterly uncoördinated and thus add to the confusion. Social workers, who are doing the best actual work, are prone to be rutty, and to lose open-mindedness for the special fields cultivated by others. Thus we need a great synthesis of moral effort such as the world has never seen, to bring together all the real apostles of the new life—those who work and those who give—and to construct out of all the various elements a national psychological and ethical enginery to conserve the resources of youth, prevent the present appalling waste of it, and to store the wealth of waters of righteousness that come so directly from heaven, and to canalize our entire social life that its streams may irrigate and refresh every part of it and meet every present need. The work to which we are called is

thus one of conserving the highest of all our racial and national resources and to convert arid moral wastes into fields teeming with harvest. This task cannot wait. The call is like that with which the New Testament opens—its tocsin words are now and here. The realization of long-delayed hopes, the averting of long-felt dangers must be accomplished at once. To do this we must call home our hopes for a far future, our desires for a distant good, and cash all their specious promises into immediate and present effectiveness. This makes great epochs, and the formula for little and mean ones is: Great plans for the future, pious hopes for all goods that are remote, and nothing here and now. Has any race ever had so urgent and imperative a call to do a present duty?

CHAPTER VI

CHILDREN'S LIES: THEIR PSYCHOLOGY AND PEDAGOGY

Impossibility of attaining pure truth—Definitions of truth and lying—The lying passion in pubescent girls seen in the history of witchcraft—Early spiritual mediums in this country—Félida X—The Creery Sisters—The English Society for Psychical Research—The Watseka Wonder—Contemporary instances of elaborate, continuous, and acted lies by girls—The childish errors of observation—Stern and *Aussage* tests—Statistical and other studies of lies—Innocent lies due to vivid fancy—Phobias of departure from exact, literal truth—Noble lies to save life and shield from discomfort—Make-believes—Pathology of lying—Palliatives—Its pedagogy.

IF every form and degree of lying were banished from the world and nothing but the exact truth were told and acted, and everything done were exiguously and literally honest, what would become of business with all its promoters and prospectuses; of all the new arts of advertising, so largely made up of seductive misrepresentations; of buying, selling, trading, dickering about prices; of specious adulterations in drugs, foods, and drinks, and in manufacturing articles to sell rather than to wear and do service? What would become of many reputations so scrupulously groomed and cultivated, of many social forms, conventionalities, amenities, compliments, fibs, white lies, etc., so deeply ingrained in our very forms of salutation, if not in language itself? Where would be all the hypocritical enthusiasms, the pretended knowledge, the affected interests, the fashionable likes and dislikes, the acted wealth by people really straitened, and the very forms of the bodies of men and women when fully dressed? What should we do about diplomacy and politics? Oscar Wilde claimed that the love of truth was increasing so rapidly as to threaten the very existence of literature, which like art itself is shot through with lies, as Plato used the word. What would become of

most forms of religion unless, of course, it be our own, and in fact, of everything that mankind up to a few generations ago has held to and lived and died by, believing it to be very truth of very truth?

If utter truth means a loss of these, what a bald, coarse, cruel, monstrous, melancholy, stark-naked world it would leave us! What pitiful figures all sorts of reformers cut who want to strip off every delusion, and even illusion which men need in such rank profusion! A clever story somewhere tells the pathetic case of a man who tried to tell the precise truth for a whole day, and at its close found himself without business, or friends, a social outcast, and involved in endless complications even with his family. We can no more live on pure truth than we can breathe pure oxygen or nourish ourselves with peptones only, for, like precious metals, truth needs some alloy. To be utterly and unjugglingly truthful always and everywhere is often heartless, if not brutal. A Hindoo tale tells of a man sent to hell for speaking the truth when he should have lied to save a life. The real truth is not merely the single fact or event mentioned, but the whole situation of which it is a part. No man can think deeply on the question of truth and falsehood without seeing the need of some thoughtful discriminations which are sometimes branded by the name of casuistry. Indeed, it is because our notions of truth diverge so widely from our practice that the vulgar theory of it has made it a wooden fetic. Were it again vitalized and brought into contact with life there would be less cant about truth by those whose life is permeated with falsehoods. There are hysterical gossips who must tell all they know, no matter what the consequences, forgetting that concealment of much if not most of the worst that we know, is often one of the very highest social duties. The formula of the legal oath to tell the whole truth applied indiscriminately everywhere would devastate society. Secrets for ourselves, for two, for a group, a fraternity, an army, etc., are virtues, and contribute very much to cement the bonds of true friendship. W. J. Kerby well says, "Our attitude toward truth is not a truthful one." Virtue must fit the situation, and the straightforward man not only states the fact, but conveys the true impression about it and its setting. To be false to a

lower, is sometimes necessary to be true to a higher, truth. Despicable as is the hypocrite, especially he of the sanctimonious type, the Pecksniff, Tartuffe, the sham pretender, the man or woman of dual life, amusing as is the shallow braggart who is at heart an arrant coward, e. g., of the Falstaff variety, the chronic and notorious liar whose word no one believes, nevertheless, there are noble lies that safeguard honor, save life and well-earned reputations, conserve public and private weal and great institutions, bury noxious scandal, and prevent impertinent intrusion into private affairs that are no one's business save those concerned. "Tell the truth, my son, in business, politics, everywhere, unless a lady's reputation is concerned, and then lie like ——," said a world-wise father. It took ages to learn that honesty is on the whole the best policy in practical life, and who is there who does not repeat—and also violate this familiar saw? All, says an Eastern adage, are honest in spots, but no one, not even the sage, is so all over. There are gracious lies that sweeten, others that advance, and yet others that make life more efficient for good.

From the great German alienist Heinroth, early in the last century, who in a ponderous treatise on insanity described its various forms as lies whereby, instead of accepting one's own nature, alien rôles were assumed or subjective concepts were forced upon the environment, down to Janet and others, who conceive mental decay as loss of vital rapport with present reality, and to the Freud school, who interpret so many forms of psychic alienations as repressions of actual experiences and bring restoration to health by recall and confession not entirely unlike the way the Catholic Church administers confession of sin—psychiatry has repeatedly associated the difference between sanity and insanity with that between truth and falsity, while the Protestant Church conceives conversion and regeneration as sloughing off the false self and falling back on what God and Nature intended us to be in making the most and best of it.

Nothing is plainer in most concrete cases than the difference between truth and its opposites, and nothing is practically more momentous than this distinction often is. Yet there is and always has been the greatest diversity in conceiving both and neither has been nor can be satisfactorily defined. Re-

ligion claims to give us truth, pure and straight from its ultimate source. The chief quest of science is truth, and logic seeks to formulate the methods of both attaining and testing it. Yet pragmatism tells us there is no such thing as ultimate truth, but that that is truest, for either an age or an individual that works best. Hence truth is diversified, relative and changed with every stage of development, and we must ever be working over our ideas. Perhaps the most interesting contemporary group of thinkers in the psychic field is now challenging consciousness itself, which has so long been the oracle of philosophy, as never saying what it means, but always dealing with symbols that need laborious interpretations, the canons of which they are now attempting to evolve. To attain truth—exact, perfect, final—has always been the supreme quest of thought, but the old skeptical query is always recurring, whether there is any such thing, and whether if it exists our minds can grasp it, and if they can, whether it can be correctly expressed by language or otherwise imparted, and if uttered whether it can be received purely. If we accept the axioms of logic or science of to-day as truth, those who know it are very few, and over against them we have vast masses of honest ignorance, sincerely held superstitions and delusions, that criticism cannot expel. If moral educational practice had to wait on theory we might well begin this simple dissertation in antique wise with the fervid prayer to the muse of truth, *Aletheia*, for guidance. Happily, however, the treatment of this theme does not lead us to these altitudes, nor do we have to warp a weary way among the ultimate questions that underlie the quest for truth. We are seeking here only pedagogic guidance in the light of reason, and from recent studies of childhood and youth. Do our normal boys and girls all lie? If so, must they, and why? What is the difference between normal and psychological lies? How should we treat the very many and diverse classes of violators of and deviators from truth?

If we limit lying to conscious departure from truth, spoken or acted, when we know better, as is the popular conception of it which has too long sufficed for daily life, it needs but the most superficial scrutiny of obvious psychic facts and processes to show us how very inadequate this conception is. The fact

is that a fabricator of ideals, an artist, is often a creator of things that are not, and he knows it. The child in reverie believes, yet at the same time knows that his dreameries are false. He makes believe so much that is not so. How little there is in common between these often beautiful lies of the imagination and the denial by a child of its most palpable wrong deed to escape punishment, or in the lie of the hysterical who finds exultation in inventing a train of incidents on purpose to mislead or work mischief, or is fascinated by being able to look at black and solemnly swear that it is white, or asseverates that any whim or fancy that pops up in a disorganized brain is objective fact!

H. J. Eisenhofer¹ says that the definition of truth as the agreement of thought with being is defective because neither the idealist nor the realist can explain how thought can grasp being, which is so *totò genere* different. Truth is really giving adequate expression to the content of the mind rather than incongruence of the latter with outer things. Descartes made four rules to be observed in the quest of truth. The first was that nothing must be accepted which was not clear and certain. Logic is aided in its quest of truth by the principle of identity and contradiction. Aesthetics comprise the feelings or ideas of the true, good, and beautiful, etc.

What is the feeling of art for truth? Lindner believed in an intellectual feeling which, as the result of a judgment, passed from the stadium of reflection which was more or less painful to that of conviction which was agreeable, and cites the joy of Pythagoras and Archimedes upon making their historic eureka discoveries. Jahn makes a special group of intellectual feelings which react to thought with the verdict true. Indeed, Drbal says that the sense of truth precedes and impels to knowledge. Krug thinks that it is a dim consciousness of the grounds upon which the validity of our judgment depends. It is a kind of divination or presentiment. Baerwald says that the case is like an awakened somnambulist who could not tell how he came to be where he found himself on awakening. Wundt calls intellectual feelings logical, but deems them very complex. The feeling for truth is a strong instinct or guide and compass. Some think it gives us the power to apprehend and is superior to all forms of knowledge and understanding. But in general we have to deal with resultant psychic states. Love of truth is the mainspring of knowledge.

As with all imponderables it is impossible to cultivate the love of

¹ Wahrheitsgefühl und Wahrheitsliebe. Rein's Encyklopädisches Handbuch d. Pädagogik, 1899, vol. 7, pp. 538-544.

truth by direct methods. It has been said that there is but one virtue and that is truth, and but one vice and that is lying. One leads to life and health and the other to destruction. If there is only one sin, even acts are sinful in just the degree in which the lie is found in them. Truthfulness is the very basis of social intercourse. Dorner thinks it is mostly justice, and that it arises from the idea of right. Natorp says it is a virtue of reason. Höffding thinks that it involves a certain surrender as over against self-affirmation, and that between these two it must square with justice.

But we wish here to be practical and concrete, and so without further premise let us first glance at a collection of cases which perhaps illustrate the most diametrical opposite of truth, viz., the chronic diathesis of falsehood. Such cases are most common among barely pubescent or pre-pubescent girls. In many an outbreak of weird psycho-physic phenomena in families and in communities the precept should be, "*Ne cherchez pas la femme mais le tendron.*"

The history of witchcraft in Western Europe, where the mania had a vastly greater development than in this country, brings pubescent girls into frequent and strange prominence for some two centuries and a half. We have here no space for details but can only point out a few of the most flagrant instances, such as the Throgmorton daughters, the eldest very imaginative and melancholy, with her mind inflamed with ghosts and witches, who felt pains and charged that a certain old woman who had once looked at her had bewitched her. Upon trial and torture, the old lady confessed that she had cast spells and caused the death of various persons, and she and her relatives were condemned to be hanged and their bodies burned, in 1593. The Pacey girl, aged nine, fell lame and then had a fit, "feeling pricked and shrieking like a whelp," vomiting pins and nails. The pins were crooked and brought by flies. This was charged upon one after another until no less than thirteen were convicted and the next day the girl and her sisters were quite well. Occasionally young girls were themselves condemned, and executed as witches. The number of children involved, in fact, Mackay¹ tells us, is "horrible to think of." This was in England, but the same was true in France and Germany. In one case the devil was said to have taken the children to a gravel pit, conjured and performed with them, and beaten them. One girl swore she was carried through the air and when very high uttered the name of Jesus and the devil let her drop, but finally healed

¹ Charles Mackay: *Memoirs of Extraordinary Popular Delusions*. Bentley, London, 1841, 3 vols.

the wound which the fall made in her side and took her to Blockville. "The lying whimsies of a few sick children encouraged by foolish parents and drawn out by superstitious neighbors were sufficient to set a country in a flame. Some of the poor children who were burned would have been sent to an infirmary to-day; others would have been flogged. The credulity of the parents would have been laughed at." In New England the witch mania really began with the young daughter of the mason Goodwin, who charged that the devil and Dame Glover were tormenting her. The theme was taken up by the two Parvis girls, who fell into daily fits. Where there were three or four girls in the family, they worked on the diseased imagination of the others and things were worse.

The famous seeress of Prevorst, Frederica Hauffe, daughter of a charcoal burner, though usually gay, had strange spells of shuddering as if influenced by things others did not feel. At the age of twelve she was sent away to be trained by her grandfather, a superstitious man, fond of visiting graveyards by night. This gave her chills and she was thought to feel the presence of the dead. Once she broke into his room at night and announced she had seen a tall dark figure in the hall and so her strange clairvoyant powers grew apace till she made a loveless marriage at nineteen and from her wedding day her health broke. She now developed her remarkable series of visions, sensitiveness to metals, crystal gazing, musical phenomena, finally saved ghosts from eternal pain by her prayers and became a minister to distressed spirits, hearing their horrid confessions and teaching them prayers essential to salvation. She spoke in unknown tongues, described the mysterious hereafter, detected obscure diseases, and finally her parents brought her to the famous doctor, poet, and visionary, Kerner, who regarded her as belonging to another world and became her impresario and her Boswell, writing a biography "of this delicate flower who lived on sunbeams," which is a record of mingled tragedy and illusion.

A Methodist farmer named Fox had two daughters, aged fifteen and twelve. The house consisted of one floor with a cellar and loft. March 31, 1848, the Fox family went to bed early, having been disturbed by strange noises, the girls sleeping in another bed in the same room. Raps, at command, rapped sound for sound the noises the girls made by snapping their fingers, in ways which showed intelligence. The news spread and there was great agitation. Parents and visitors asked questions and raps answered. A rumor was revived that a previous tenant had heard knockings and other noises and it was immediately supposed that this was the work of ghosts. In answer to questions raps indicated that a man had been formerly murdered for five hundred dollars and buried in the cellar, and there was a rumor that digging had revealed teeth, bones, and a broken bow. The age of nearly all the neighbors was correctly rapped, the number of children, and deaths. Later one Fox girl went to Rochester and the other to Auburn and in both places tiptomania broke out. An older

married daughter became a medium. Podmore¹ says there were soon some two hundred families where such phenomena broke out in Ohio and a hundred mediums in New York that met private circles. In 1851 three physicians investigated and reported that the noises could be made by movements of the knee joints. With the feet wide apart and on cushions and the legs straight there were no raps, nor were there when the knees were tightly held. It developed that various people could make similar raps by the toe joints, that the raps were better if the feet were warm, etc. The younger Fox sister is said to have explained that if her foot was at the bottom of the door the raps would be heard at the top if she looked at the top, and to have admitted that she made them with her toe joints and could make them with both knees and ankles. One of the sisters gave a public demonstration of how the raps could be produced, but this was afterwards denied or recanted.

In 1852 an Ohio farmer named Koons, finding his eight children gifted, built a log cabin equipped with spirit instruments, where strange physical manifestations occurred ascribed to a large band of pre-Adamite men and women.²

A Connecticut clergyman married a widow with four children, a girl sixteen, a boy eleven, and two younger, and soon wondrous disturbances broke out. In an attic were found eleven "figures of angelic beauty which were really dolls in attitudes of devotion, and these were thought to have been mysteriously constructed." Once, alone in his study, turning his back, the old gentleman found his writing paper covered with hieroglyphics. Chairs were moved, missiles thrown through the glass, letters were written without hands, the boy was hung on a tree, the girl was tied, forks bent, warm hands felt under the table. A. J. Davis investigated and found the raps due to "vital electricity" discharged from the older boy. One investigator after violent rappings and throwings sprang to the room of the sixteen-year-old girl and found her in bed but nervous, palpitating, and with a very red face. When the boy went to school the spirits tore his books and tore his clothes. The disturbances all centered about the older boy and girl. The spirit of mischief often seemed to take possession of them.

The history of the earlier days of spiritism in America is a very sad one. In scores of houses there were strange doings, spirit messengers, often hoaxes and fiction. Our country was then sparsely populated and this and the character and amount of popular education and the absence of intellectual centers caused a great deal of crude but vigorous thinking and many a strange, weird movement.

A young daughter of Judge Edmunds rather suddenly became a

¹ Frank Podmore: *Modern Spiritualism; a History and a Criticism*. Methuen, London, 1902, 2 vols.

² H. Addington Bruce: *The Riddle of Personality*. Moffat, Yard, N. Y., 1908, p. 247.

medium, speaking several languages. There was weird music, to which spirits sometimes beat time by raps; clothing, hair, and beard were tweaked, bells rung, and the religious sense was so strong that everything was given a supernal interpretation. In 1873 some young boys who had read a book entitled "The Medium and Daybreak" held a dark *séance*, one of them falling into a trance and writing poetry in mirror script from Thomas Campbell. This and his babbling, ascribed to a great Indian medicine man, were accepted, as was a farewell to earth by Poe. A girl of thirteen saw a child in a white pinafore running along the hall without sound of footsteps. In 1883 Podmore tells us of a servant girl of sixteen, the daughter of an invalid mother, who caused all sorts of things to fly about the room, fall downstairs or jump about, leap into the fire, go into the air and fall. After a good deal of superstition, when this girl departed all these phenomena ceased. In 1894 at Durweston, England, many spirit phenomena centered about a consumptive hysterical girl of thirteen. In Arundel, in 1884, there were strange scratches, messages, movements, images, antics of the clock, centering about another girl of thirteen. In Berkshire, in 1895, a girl of twelve with weird, uncanny look, did many things, pretending to look in another direction and always denying everything, but was finally detected in a long series of wild performances. A Shropshire girl of thirteen, who had made many things move and hang apparently unsuspended and who used to cry out that an old lady was choking her, finally confessed and showed how she carried out her performances. Another tall, pale girl of twelve, in the south of England, who had outgrown her strength, caused a good deal of popular excitement, saw all sorts of strange things, was bound, beaten, caused spirit touches and thumps. Podmore enumerates eleven such cases. Bruce, in his "Historic Ghosts and Ghost-Hunters," New York, 1908, made a study of the well-known story of the drummer of Tedworth, whose ghost was supposed to have returned to punish those who had maltreated and played all kinds of tricks on him, and concludes that the root of all the disturbances was a girl of ten and her sister, since wherever there were scratches and raps these naughty juveniles were found near, chuckling at their mischief, which many thought so mysterious. In this case they did not cause the first outbreak of the excitement but caught the spirit of it. Bruce also thinks that the mysterious events at the home of the father of the famous Wesleys, which began with blood-curdling groans and terrific knockings, until outsiders were invoked to lay the ghost, all centered about some of his seventeen children, who gobbled, broke glass, and made noises like money. This Bruce thinks centered in the third girl, sprightly, gay, vivacious, precocious, nocturnal in her habits, whose tremblings when her room was suddenly entered by people with pistols may only have been suppressed laughter. She had a passion for scribbling and later became a poetess. The famous ghost of Cock Lane, too, owed most of the reality it ever possessed to the daughter of a clerk, aged twelve, who

brought disaster and disgrace to a most worthy man by playing upon the superstitions of the people from an uncontrollable hysterical impulse.

Félicité X.,¹ of Bordeaux, was normal till thirteen, and since then really educated Taine and Ribot and furnished the chief arguments against the Cousin school of philosophy. But for her, Janet says, there would have been no chair of psychology at the Collège de France. She showed hysterical symptoms and periodically fell into a trance, emerging with a new personality. The second Félicité was a marked improvement over the first, who was doleful, fretful, and glum, while after the trances she became vivacious. In the second state she remembered all of both, but in the normal she knew nothing of the second condition. At fifteen she came to Azam, who tried in vain to check her crises. She really cured herself in the end, for the second state got command over the first till the latter rarely appeared and she became a new woman. Only once when she lapsed into the first state was there a loss of memory for the occurrences of the now long period. She then ignored the dog, her household arrangements, social duties, etc., so that when she felt an attack coming on she wrote letters and gave in advance full instructions as to her social affairs, in order to bridge the gaping memory. Azam found her, in 1858, and in 1887 she was married, a happy mother, and constantly in the second state, save for half a dozen lapses a few hours at a time per year.

Marcelline from the age of thirteen suffered from hysteria and chorea until at last vomiting supervened and death seemed imminent from exhaustion. When Janet hypnotized her he produced a somnambulant state in which she could both eat and digest and her weight increased, but she could eat only when hypnotized. After leaving the hospital, she soon became as bad as ever, but Janet finally succeeded in establishing her second personality, in which she not only recovered but passed an examination she failed to do in the normal state.

In the first volume of the "Proceedings of the Society for Physical Research" (1882, p. 20), Professor Barrett introduces the five Creery girls, between the ages of ten and seventeen, "all thoroughly healthy and as free as possible from morbid or hysterical symptoms and in manner perfectly simple and childlike." The father was a clergyman "of unblemished character," who had often experimented with telepathy on his daughters and "a young servant girl." These sisters thenceforth played an important rôle in the "Proceedings" of the English Society and were thought to have remarkable mind-reading powers. Many *séances* were held with them by diverse savants which in the "Proceedings" of the society occupy a large place during the next five years. At the close of the volume of "Proceedings," June, 1888, appears a note stating that the Creery girls had been de-

¹ E. Azam: Double Conscience, état actuel de Félicité X. Impr. de Chaix, Paris, 1883.

tested in collusion, not only when two of the sisters were acting as agent and participant, but that an auditory and visual code had been used when one was a mere spectator, that the third sister had "confessed to a certain amount of signaling," and Mr. Gurney, while suspecting that the signals had been used far more than had been discovered and had been developed before the sessions, again regrets that precautions were not more stringent, and rather tenderly says that the girls probably "feared that visitors would be disappointed." Henceforth the very name of these girls seems to be eschewed from all the writings of this Society. It would be very interesting to a psychologist to know far more than we are told about this exposure and confession, when it was begun and whether the girls grew up to be "thoroughly healthy and normal." We seem here to have a case where girls in the early teens developed and indulged the passion for deception under conditions where great men and themes were involved which would seem calculated to bring home a sense of seriousness and honesty to all those capable of these sentiments, but the personal motives to deceive were too strong to be overcome even under these conditions. Fortunately the Society had the courage to go on its way with other subjects and other themes. There is no evidence that their belief in telepathy was much shaken, nor their sense of the subtlety of the passion for deception was very much deepened. Among the lessons to be drawn from this case is that much moral responsibility is involved in using maidens at this seething and susceptible age to demonstrate supernal powers. Probably few conditions involving stronger temptation to mislead can be conceived.

The Watseka wonder was too much for Hodgson, the Sherlock Holmes of psychic research. Lurancy Vennum, aged thirteen or fourteen, eighty-five miles south of Chicago, July, 1877, sitting with her mother, fell unconscious and stayed so five hours. She did so again the next day, but while insensible to all about her began to say she was in heaven, describing spirits who had died. Her pious parents thought her fits trances. They lasted from one to eight hours and sometimes occurred several times a day. Physicians could not help and in 1878 she was about to be sent to an insane asylum, when an unknown neighbor appeared, a spiritualist named Raff. He had a daughter long dead who had had about the same symptoms and had been a supernatural clairvoyant, who had also been deemed insane but whom Raff thought a sound victim of spirit infestation. A spiritist doctor, Stevens, was called, and found the girl doubled up, looking like a hag and ugly, calling her father Old Black Dick and her mother Old Granny. She was silent, but was interested when she found Stevens was a spiritual doctor. She vowed her name was Katrina Hogan, aged eighty-six, and that she had come from Germany through the air three days before. Then quickly changing, she said she had lied, and was really a boy, Willie Canning, who had died, and is here because he wants to be. Finally she threw up her hands and fell in a

cataleptic fit. The doctor magnetized her and found that she was no longer on earth but in heaven surrounded by better spirits. The doctor suggested that she could be controlled by one who would keep away the evil ones and she announced that she had found one on earth, Mary Raff. This her father welcomed greatly. Lurancy slept well that night but thereafter was Mary Raff, not recognizing father or mother but demanding to be taken to the Raff house, calling Mrs. Raff "Ma" and a married sister "Nervie," hugging and kissing them and whispering allusions to past events. To her parents this seemed a new phase of the insanity, but the Ruffs had no doubt that this was the real incarnation of the girl they had buried twelve years before. On the way to the Raff house, crossing the entire city, she turned into the house where the Ruffs used to live when she died, and when forced to go on to their new home identified many objects and told the Ruffs that the angels would let her stay some time. She was now entirely well, had forgotten her life as Lurancy, but remembered everything connected with Mary's career. She knew she was masquerading in a borrowed body and described where Mary was buried. She stood most tests such as recognizing a hat that Mary wore and a collar. She performed a few clairvoyant stunts and remained with the Ruffs for more than three months, enacting with great fidelity the new rôle. But in May she told Mrs. Raff in a broken voice that Lurancy was coming back. She glared about, cried, "Where am I? I was never here before; want to go home." Then she became Mary Raff again for several days, lapsing back into herself. On the road there were sharp interchanges of personalities. Now she would weep at leaving her father and then call him Mr. Raff. On returning home she was healthy and normal, completely cured, the Ruffs thought, by their daughter. Dr. Stevens wrote the case up from the spirit standpoint. Mr. Raff vowed it was true and that he was an honest man, as he seems to have been. In this state of things Hodgson arrived, April, 1890. Lurancy had married and gone to Kansas. She was now a strong, healthy woman, although for a time there were occasional returns of Mary's spirit; but this had ceased. She married a skeptic and had not developed, which her father regretted. Hodgson concluded "the case to be unique among the records of supernormal occurrences," and said he "could not find any satisfactory explanation of it except the spiritistic."

N. Kotik¹ experimented on a girl, Sophie, of fourteen, in southern Russia, of mixed blood, delicate and of neurotic family, who with her father had given public exhibitions of thought transference. When the author controlled and varied these experiments, the father was requested to stand five paces behind the girl, whose eyes and often whose ears were stopped, while he was allowed to make no sound or

¹ Die Emanation der psychophysischen Energie. Bergmann, Wiesbaden, 1908, 130 p.

movement. He, nevertheless, communicated to her words written by bystanders and shown to him. Again, he would write and think words which she would repeat, nearly always correctly. The same occurred if the father and daughter were in different rooms, each holding a wire that passed through a keyhole. In another series of experiments, a schoolgirl of eighteen, Lydia, answered questions thought of but not spoken. Those questions were often quite definitely answered, usually by spelling out the responses by moving a pointed cardboard to letters before her in a light so dim that others had difficulty in distinguishing them. Lydia also described postal cards that only the agent saw, as she also did mental images which others called up; and letters from the agent's friends were partly reproduced or answered.

These observations suggested to Kotik the experiments of the French physiologist, Charpentier (*C. R. Soc. de Biol.*, 1904, 12-19. Also Bordier, *Les Rayons N.*, 1905, p. 76) that active brains emanated dark rays, somewhat akin to Blondot's N. rays, although specifically different from these which, although dark themselves, caused a phosphorescent screen on which they fell to glow dimly. These rays were not thought by Charpentier to be connected by thought transference; and most now deem their effects upon the screen due to autosuggestion. Kotik, however, concluded from further experiments upon such a screen as Charpentier had, that brains emit such rays when in action, not when at rest, that affect a phosphorescent screen; but he believes that we have here the real agent in thought transference, that psychophysis emanations are emitted always and by all, and that in cities and crowds the air is literally and physically saturated with them, and that they modify the consciousness of all, although in vastly different degrees. Impinging upon very sensitive brains of others, they cause them to reconstruct similar moods and even images. They almost annihilate the individuality of sensitive, mediumistic percipients who are but slightly protected from the influence of other brains, influences from which may positively infect them. Thus the phrase that ideas are in the air is literally true. Psychophysis energy, we are told, can be conducted from the agent to the ground by a wire, so that a telepathic message does not reach the agent. It comes most abundantly from the unconscious regions and flows over to the extremities, e. g., the hands, on which it accumulates; as also it may pass to blank paper clinging about it for some time, and can thus be interpreted by a percipient. It is hard for it to penetrate closed doors and other obstacles, and other objects are obstructive in different degrees.

It need hardly be added that any experiments like these must be regarded as utterly inconclusive, since the writer has little conception of the many modes by which such transferences as he describes may be conveyed. His precautions, therefore, seem utterly inadequate. As to his experiments with N-rays, they fall no less short of the accuracy which should mark the work of science under controlled conditions.

P. A. M. Richard's thesis¹ consists largely in the description of pathological cases. He shows the proneness of hysterical women to fly in the face of truth. Theirs, however, are pseudo lies, if they result from dreams, delusions, troubles of conscience, external suggestion or perturbations of memory or personality. Hysterical patients can, however, truly lie, although their mendacity may be a vent and perhaps a relief for their malady. The vice is due, in such cases, to psychic feebleness, puerility of character, and mental ataxia. This habit may have the gravest consequences for friends, and complaints must be carefully analyzed. Such patients cannot be held entirely responsible for their falsehoods, and their testimony in court has slight value.

A. Delbrück² has given us an anthology of almost classical cases of psychopathic lies; and shows in cases where falsehood and delusion are combined that complete responsibility before the law is impossible. Often the beginnings of this perversion are seen in slight deviations on trifling things, and pass gradually to diametrical contradictions concerning the most vital and essential matters. Many swindlers have been partially sincere, and some of the insane, who were subject to the most perverse hallucinations, often show signs of incomplete credence in them. Where conviction is attained it is often not of the calm stable kind. *Pseudologia phantastica* has many literary representations to which this author refers. In some states of consciousness it is possible to really lie, and yet to do so in perfect good faith. Whenever the power of reproduction weakens and fancy increases in strength, we have this type of degeneration. Thieves are perhaps the most artistic and dexterous liars. Those who commit violent crimes lie in a clumsy way. Very often experts seem to lose all sense that they are lying, even in the very act of doing so, for it has become complete second nature. It is very often difficult to distinguish between insanity and simulation. In the best of Sully's works—that on illusion—he shows how akin it is to error, and how commonly we are deceived by our own experience. Yet there are some who persist in lies despite the fact that at the same instant they have a keen sense of their falsity. In mania there is often a strange mixture of truth and poetry which breaks up on slight examination. Kraepelin has cited many cases of illusions of memory which were interpreted as falsehoods, and some of which vanished under slight criticism. They sometimes coexist with clear judgment. They can be produced by retroactive hallucinations.

Göbelbecker (Zeits. f. exper. Padagogik, 5. Bd., S. 50) gives an interesting case of the harmless play of childish fancy, which he compares to blowing soap bubbles and with abnormal self-deception

¹ Le Mensonge chez la femme hystérique. (Thèse méd.) Y. Cadoret. Bordeaux, 1902, 66 p.

² Die pathologische Lüge und die psychisch abnormen Schwindler. Enke, Stuttgart, 1891, 131 p.

or pathological imagination; and concludes that the factor of religion is the chief one for the cultivation of the phantasy.¹

A. Pick² describes two interesting cases of pathological dreamery with hysterical symptoms. First, a girl of eighteen suffering with delusions of greatness, who thought herself an empress, etc. Sometimes the reality of her illusions seemed to be open to question; but usually they persisted and were strongly developed in her letters. The other case is that of a twenty-year-old servant girl, who had suffered from a sexual attempt at the age of fourteen. She was found tied and told a story in detail, which was later doubted. This patient wrote love letters and sent them to herself. In one she described herself as located in the forest, and when she received the letter, went there at once, ran about weeping as if expecting to see her lover, and coming home complained to her mistress that he had assaulted her. She thought she deserved punishment; and evenings on going to bed saw herself tied with chains and imprisoned.

The following cases illustrate a very different and, on the whole, less abnormal class of cases:

Two German immigrants in New York brought up their daughter, born here, on a diet of literal truth, and tabooed fiction, poetry, and imagination as lies. She was bright, at twelve had never read a fairy tale or a story book, but was constitutionally dreamy and ardent-souled, with a great passion and talent for music. Her mother once told her she might perhaps sometime play to the President. Soon after, at the dedication of Grant's tomb, she saw Mr. and Mrs. McKinley, and one day rushed in breathlessly, saying that they had visited her school, heard her play, might adopt her, would give papa a place in Washington, etc.; but Mrs. McKinley was out of funds and her husband was in Washington. Accordingly, Gertrude's father drew a hundred dollars from his fortune of fourteen hundred in the bank and sent it by his daughter, who brought back costly flowers. Upon more excuses, more money was loaned, and more presents were sent to Gertrude's parents, a canary, a puppy, a diamond ring. Gertrude conversed intelligently on political topics and her father gave up his position as he was about to accept a five-thousand-dollar job in Washington. Then came the crash. Gertrude had never met the President nor his wife, but had made lavish presents and bought many articles which she had stored with a neighbor, and to her

¹ See P. Félix-Thomas: *Le Mensonge*. *Revue Pédagogique*, 1907, vol. 50, pp. 509-519. Also *Die pathologische Lüge*, by H. Piper. *Zeits. f. Päd., Psy., Path., u. Hygiene*, 1906, vol. 8, pp. 1-15. From the preceding article and also in the following many cases are cited in this text. *Einige interessante Kinderlügen*, von O. Lipmann, *ibid.*, pp. 85-88.

² *Ueber pathologische Träumerei und ihre Beziehungen zur Hysterie*. *Jahrb. f. Psychiatrie u. Neurologie*, 1895-96, vol. 14, pp. 280-301.

parents' especial horror had laid in a large stock of fairy tales and other fiction. This points a moral against the pedagogic theory that would starve the imagination.¹

A bright girl of thirteen was brought to a Sunday-school class, at the close of which she declared she was unable to walk, and so a lady took her in her carriage to her house. That evening the clergyman heard a moan and found this girl on his piazza, tied hand and foot, with a rude splint made of shingles on her arm. She said she had been beaten and left on the street near by but managed to crawl to the piazza. He and his wife sat up all night with her fixing the splint and in the morning a lady neighbor took her to a house she falsely designated as her home, but as the lady rang the bell to have her carried in she slipped out of the opposite door of the carriage and ran. Her mother, who was afterwards found, declared that the girl loved such adventures.

A Boston schoolgirl of thirteen, Mary G., fell sick of diphtheria but was well on the road toward convalescence when a girl classmate brought the news to the teacher in school one morning that she had suddenly died, telling of the death with great detail, and in due time reporting the funeral. Many wept and at the suggestion of the teacher a collection of a hundred and sixty-three pennies was made by the children for flowers. These the teacher sent to the mother with a note of condolence and went to express her grief. The mother was dismayed at the news and on telephoning to the hospital it was found that Mary was well enough to go home that day.

A girl of eight came to school one morning in the fall with a full account of a summer's visit to Europe, during which she had ridden a horse, had a railroad accident, experienced a severe storm at sea, and had many other adventures, although in fact she had never left home.

F. Guillermet² reports a very imaginative girl of twelve years of age. On being reprimanded for bad work in school she excused herself by saying that a little sister had just been born at home and that had put the house in confusion. This child was the subject of conversation between teacher and pupil for several months, and survived various infantile maladies. Finally it died and the pupil was excused to attend the funeral. Upon calling to express sympathy for the bereaved mother, what was the teacher's astonishment to learn that there had never been either infant, disease, or death. This child³ eight years later became a remarkable spiritual medium.

J. Demoor and Daniel⁴ report another girl of twelve who reported her mother sick at home and gave many details. She grew steadily

¹ This story is told more in detail in the preface of C. A. Ragozin's *Siegfried and Beowulf*. Putnam's, N. Y., 1898, 332 p.

² Un cas de mensonge infantile. *Archives de Psychologie*, 1902-3, vol. 2, p. 377.

³ Les Enfants anormaux à Bruxelles. *Année Psychologique*, 1900, vol. 7, pp. 296-313.

worse and died. After a few days the child returned to school weeping and clad in black. Some months later the father married again and the child repeated the details of the wedding as she had done of the funeral of her mother. Sometime afterwards it was learned that the mother of this child was living with her father and had never been ill.

T. Jonckheere¹ quotes a case of a backward girl, also twelve, who was thought to have some symptoms of rickets and was examined in the presence of an instructor. To this end she only had to unbutton her dress a little behind that the spinal column might be felt. On returning to the class she stated that the doctor had entirely undressed her. This gave rise to public accusation and calumny for the physician. Children's lies have often, thus, a legal significance, and this is a question that should bear upon the age and circumstances under which their testimony should be admitted in court. The very sensations of backward children are often defective; still more so their attention, associations, and judgments.

The literature of imaginary companions is now represented by quite a list of reports. Chairs are often set for these creations of fancy at the table. They have many adventures. There are many epidemics of hair-clipping, and the existence of sexual perverts who have this mania is undoubted; nevertheless many of these cases are entirely fictitious, one estimate being that about three out of ten are true. In other cases girls have cut off their own hair to make the sensation and to be the centers of interest, and in other cases have honestly thought their hair longer or more abundant than it was and so have imagined an adventure.

There is a sense in which all virtue is truth and all error and sins are lies. Fidelity to human nature and its real needs is the highest truth. Of course teachers and parents can do very much to develop truthfulness, which at first is loyalty to persons. Without affecting a nimbus of infallibility they can at least rigorously keep their promises and execute their threats and avoid casuistry and over-subtlety, and taboo the current social lies of conventionality, fads and shams, and set examples of real and constant love of truth. It must, however, be reluctantly admitted that the sciences of nature are a little hard on the imagination of young children, who find in the humanities, literature, poetry, and romance, much more that is congenial to their own nature, which has thus more appetizing pabulum.

I have culled these cases, which could be indefinitely multiplied, because they are representative, and illustrate so many points which psychology should investigate on account of

¹ *Le Mensonge chez les Arriérés*. Archives de Psychologie, 1902-3, vol. 2, pp. 263-66.

their great scientific and practical importance. We know little of the female soul and are just beginning to realize our ignorance. These often thwarted and aborted lives show, I think, a propensity to attract attention and to be of importance, which is abnormal only in its degree and is morbidly and precociously developed. Some of these cases represent the revolt of natures handicapped by heredity and cramped in a narrow sphere, repressed more even than has been the lot of the average woman during all the historic period. Modes of asserting themselves like the above are, of course, very pathetic. Psycho-analytic methods which consist of reactions to test words by naming others first suggested by them, show that where the response is truthful and immediate, the time required by the mind to pass from a suggested idea to the one nearest related to it is always less and often much less than where the nearest association is passed over and another one that arises later selected to avoid betrayal. Thus criminals and all those with painful experiences in their lives which they desire to conceal can, as is well known, often be detected by the long pause between the stimulus-word and the reaction to it. Lying involves hesitation, and this sheds light upon the very nature of consciousness as essentially remedial and therapeutic. Some of the above cases are intoxicated with the lust to broaden their experience, be and do things that they have heard others were or did, or to make possibilities actual. Moreover, there is a strange tingling inebriation with the sense of being alive, that flagrant falsehood better than anything else can excite in some natures. Precisely what they are not, they assume; what they cannot achieve, they do; wishes reel and riot toward realization. They become drunk and debauched with lies as many have recourse to strong drink to escape the stress and strain of real life when it is hard, poor and mean, for this is the chief motive that drives many to drink. Without entering here upon this which is one of the most fascinating themes in contemporary psychology, it must suffice to say that it is this view point which reveals the best of all cures and preventives of lying, viz., to enlarge and enrich actual life, to fill out experiences, so as to narrow the chasm between fact and fiction. The more physical development which tends to establish a close bond

between knowing and doing, the more varied and interesting and absorbing the daily life, the more the best and the strongest feelings are stirred and given vent; the more the youthful soul palpitates with the joy of existence and accomplishment, the more zestful is the knowledge acquired and the less is the temptation to every form of lying. Conversely, where life is made dull and straitened by the environment or tense by disease or defect, so that the soul is habitually hungry, there we have temptation to many ways of escape, from runaways to falsehood. As Jove was said to have recourse to his thunder only when he was wrong, so error is more prone to be fanatical than is truth. Without knowing it these hysterical girls feel disinherited and robbed of their birthright. Their burgeoning woman's instinct to be the center of interest and admiration bursts all bonds, and they speak and even act out what with others would be only secret reverie. Thus they can not only be appreciated but marveled at, can almost become priestesses, pythonesses, maenads, and set their mates, neighbors, or even great savants agog and agape while they have their fling at life, reckless of consequences. Thus they can be of consequence, respected, observed, envied, perhaps even studied. So they defy their fate and wreak their little souls upon expression with abandon and have their supreme satisfaction for a day, impelled to do so by blind instinct which their intellect is too undeveloped to restrain. And all this because their actual life is so dull and empty.

Kemsies, Burden, and Perez conclude that all children lie occasionally and that many have periods of doing so. Jean Paul Richter says that up to five few children can have any sense of truth or falsehood. Most pedagogues, doctors, and jurists who have lately written so much on the subject have a very poor opinion of children's truthfulness and reliability in matters of importance where they become centers of interest, and hold that their testimony in court should always be accepted with caution, although, let us hope, that most try to be trustworthy. Imaginative children easily deceive themselves. When they feign pain they often really feel it, illusory though it is. One very early symptom of hysteria in girls is the disposition to fabricate. There is sometimes a strange exhilaration and even intoxication for the most violent ruptures with objective truth and a passion both to simulate and to dissimulate.

Demoor strongly advocates the exclusion of constitutional liars from school as dangerous sources of infection, but we should not

forget that it is the voracious appetite for knowledge that often makes children credulous. If the curriculum is formal, contentless, and uninteresting, this tendency to break out and escape if they cannot find objects of interest is strong. The mental constitution of children is full of slumbering latent tendencies to most of the experiences of the race that have been so rich and manifold, and its push-up toward an out-crop in the fecund fancy of youth is strong. Some so-called lies are doubtless projections of ancestral experience into the child's consciousness. Children love and doubtless prefer truth but they want it in great abundance and it must palpitate with reality and emotion; and if their life is poor and their environment unfurnished, they supply themselves with an objective world that meets the cravings of their soul even if they have to improvise it. Thus the craving for excitement is something that needs to be met in the interests of truth.

Very different and far more common are errors characteristic of childhood which very often shade over by imperceptible gradations into fabrications. The human organism is so made that man is prone to deception. The senses are fruitful of illusions and delusions, which one of the most interesting chapters in psychology explains. Straight lines seemed curved, and *vice versa*. The color sense and that of motion are easily deceived. Conjurors have stated that they can almost make any man believe he perceives anything.¹ Of 165 children 78 described a ball going upward and disappearing in the air when it was not thrown at all. Of 381 children 76 saw a toy camel move when a crank which they thought drew it was turned, although in fact it was motionless. Distilled water seems perfumed by suggestion. The prestidigitator's patter, which is often his real art, consists in misdirecting attention, while the essential thing is done in its indirect field. The art consists in guiding perception to what is not done. In fraudulent spirit manifestations, dozens of people recognize the same mask in a dim light as the face of their dead relatives. Mediums are seen to rise in the air, things vanish in the fourth dimension of space. Error, like truth, flourishes in crowds by contagion. Hence tricks are easy before large audiences. As the strength of a chain is its

¹ See N. Triplett: *The Psychology of Conjuring Deceptions*. Amer. Jour. of Psy., July, 1900, vol. 11, pp. 439-510. Also Joseph Jastrow: *Fact and Fable in Psychology*. Houghton, Mifflin, Bost. and N. Y., 1900, p. 106 *et seq.*

weakest link, so the critical power of a crowd is its weakest individual. The story of psychic delusions, epidemics, and fads seems to show that victims love to believe and hate to be undeceived by coming to the truth.

An unique series of studies on children's capacity to observe and report truthfully has lately been made which is of interest and importance to jurists and to psychologists. Most of these have been published in the German serial entitled "*Beiträge zur Psychologie der Aussage*." One of the first of these, however, was by M. Buisson¹ who collected reports on data from 110 schoolboys and 40 girls, and classifies their returns as follows. First, he found half a dozen strictly pathological cases. In a second group fell another half dozen cases due to overstrict teachers and brutal parents, where lies were the product of fear. In a third group of some 25, lying was a product of a vicious environment, chiefly at home. In some cases children were taught to lie and steal, or perhaps given too much liberty and too great responsibility. The fourth group comprises lies of interest, beginning with exculpation. To have once escaped merited punishment by a lie often marks a sad epoch for a child. Under lies of interest, which belong here, fall perhaps especially those which are inseparable from theft. The fifth group of lies are motivated by imagination, vanity, desire of display. At first, the child may a quarter believe his own fable. Soon he cannot distinguish between what is real and what is fancied. It is an æsthetic necessity to recount what is beautiful and to embellish facts. One constructive liar almost recited the stories of the *Odyssey*.

In the above groups there seem two larger classes: first, lies that begin in an hallucination and develop automatically as the imagination warms, perhaps to improvisation or to consummate cleverness, or courage that becomes foolhardy. In the other class fall lies of conceit, affected superiority, and here is the chief danger of moral perversion. The above classes do not include lies without motive or those due to pure malevolence.

M. Lobsien² tested 469 boys and girls from nine to fourteen as follows: *a.* A chart containing twelve clearly but simply drawn familiar objects was shown for five seconds, when the children must immediately write down how many things they saw and also what. *b.* Water was shown and the experimenter pretended to put in a drop of a named, and in another experiment an unnamed, substance that appealed to taste. Each child tasted, with hygienic precautions, and in the first case was asked to state whether the substance was de-

¹ Rapport oral sur les mensonges d'enfants. Bull. de la Soc. Libre pour l'Étude Psy. de l'Enfant, 1902, pp. 130-137.

² Aussage und Wirklichkeit bei Schulkindern. Beiträge zur Psy. der Aussage, 1903, vol. 1, Heft 2, pp. 26-89.

tected, and in the second what it was. This was repeated also in two-fold form for smell. *c.* Four groups of ten words each, designed to test the type of memory, were read, to be immediately written afterwards. *d.* A colored picture was shown for two minutes, and twelve questions asked about it. *e.* A theatrical representation of simplified plays was seen, to be described. In comparing the children's statements with the facts, the age of twelve was found best for test *a.* Nearly half stated that they had seen more than the twelve things shown. To this error girls and younger boys were most prone. From two thirds to three fourths of the objects seen were named, and when the experiment was repeated twenty-four and then again forty-eight hours afterwards, more objects were named, but the order was greatly changed. In *b* all the children at the age of eleven and twelve, mostly boys, tasted and smelled a purely imaginary substance, but at the age of fifteen or sixteen only a little over one third did so. When the substance was not named the imagination in the false cases took a very wide range. In *c* many things not in the picture were imagined. The boys' description of the boy who lay fishing on a bank in the picture was of a hale, rough, stalky fellow, but the girls called him pretty, with a pleasant face, fine, with white shoes and satin jacket, light-blue eyes, and in general made him too delicate and refined. Boys excel girls throughout, even in color. Girls were more prone to underestimate numbers and distance in perspective, and boys to overestimate them. No fish were in sight, but in answer to the *verrier* question, how many fish he had caught, the boys in all say 142, and the girls 73, both often naming a number. Throughout the striking result is the number of omissions and falsifications. By analysis it appeared that the acoustic-optic and the type combining these with the motor are more common than the pure types or than any other combination, and that these types give truest and fullest returns. The worst optical testimony was by those essentially ear-minded and *vice versa*. The highest intelligence goes with the motor type, and the worst pupils are in the acoustic group. One surprising result is that when the questions were repeated twenty-four and forty-eight hours afterwards without showing the picture again, better results appeared, more things were named, and the descriptions were better than when the record was made immediately after seeing, so that freshness of impression and truth were in a sense opposed. In a subsequent study¹ Lobsien showed that for some if not most of these tests, the number of reproductions increased for successive days, at least seven. This result surprised him and he repeated experiments, all of which confirmed it. He ascribes the improvement of statement to will, wish, or to suggestion, etc. He concludes that the optical type does not make the best witness even to what is seen. The theatrical experiments gave few new results.

¹ Ueber das Gedächtnis für bildlich dargestellte Dinge in seiner Abhängigkeit von der Zwischenzeit. *Beiträge z. Psy. d. Aussage*, 1904, vol. 2, Heft 2, pp. 17-30.

William Stern¹ showed a highly colored picture of a peasant family at dinner to school children of from seven to eighteen years individually for one minute, telling them to observe carefully every detail. This was done in a room apart from the school and each child was asked to tell all it could recall. This was stenographically noted. When all that could be spontaneously reproduced in this way had been stated, a second stage of the experiment consisted in asking questions, exhorting each to answer carefully and with fidelity. The pupil was then dismissed, but charged not to speak of the experiment to his mates, and some days later was asked to repeat his narrative, and questions were also asked again, although the picture was not shown. The result showed that about one fourth of all the declarations were false. Boys excelled girls in the number of right items about ten per cent. At the age of seven, one in three, and at fourteen, one in five, statements were false. In the number of items boys improve fastest from seven to ten, while girls make little advance, but improve very rapidly from ten to fourteen, and at the latter age slightly excel boys. In fidelity of reproduction boys are best till twelve, when they are surpassed by girls. In the spontaneous statements there were but six per cent of errors. The number of correct spontaneous items was at thirteen double that at seven, and trebled it at eighteen, but the degree of correctness changed little with age. Answers to questions were nearly one third false. In 131 instances out of 2,764 questions to forty-six pupils, objects were put into the picture that were not there. The constrained depositions were in general five and a half times as erroneous as when the statements were free. The false answers were due to erroneous association suggested by the question, which prompts to fill a gap, and the answer is often a product not of conviction but of anxiety. Alternative questions with "either or" prompt random replies. The falsifications are sometimes gross. In spontaneity value, persons lead and things follow. Optical space is more reliable than color and the registration of objectivity is in general not pure, but a product of selection by attention and interest; still, the latter best secures correctness. In nearly all respects boys excel girls, and the improvement due to age is in just those matters where boys excel, so that the result is as if girls were younger. In the spontaneous utterances the per cent of error remained pretty constant, whatever the number of items. For a few years before puberty improvement was very slight, but when it dawned became rapid for several years. Taking all the tests together the average improvement from seven to eighteen is only some fifty per cent, showing that this function is not basal as an index of mental development. Spontaneity versus receptivity shows a greater increment and is a better index, for with it goes a stronger resistance to false suggestion. Substance, action, quality-relation are three stadia of development which are also probably seen

¹ Die Aussage als geistige Leistung und als Verhörprodukt. Beiträge z. Psy. der Aussage, 1904, vol. 1, Heft 3, p. 147.

in speech. Practical anthropocentric interests lead. Girls are even more inferior in spontaneity than in receptivity and every difficulty increases their inferiority, boys at fourteen, just entering puberty, about equaling girls of the same age, who are in the height of this ferment. Girls emphasize personal and boys the material interests, their reliability even in color being somewhat markedly behind that of boys.¹

Stern in his "Erinnerung, Aussage und Lüge in der ersten Kindheit," I and II, gives a number of interesting illustrations and distinctions between real and apparent lies, with a final chapter on cure and prevention, laying chief stress on prophylaxis. Preventive measures can be overdone. Severe discipline is one of the chief provocatives of lying, so that self-control and harmonious relations with its environment must be considered one of the chief preventives.

A. Moll² passes judgment upon the experiments of the *Aussage* psychology that deal with errors in memory and perception, etc. Stern and Lipmann admit the need of control to be sure that the attention is called to the object and errors if improvement is sought. Moll thinks, however, the results of this kind of work are very slight, that the suspicion, too, as cast upon children's reliability in court is excessive. Opposite results as to the liability of the two sexes are obtained by different investigators. The controlled conditions of the experiment have not rendered all that is expected of them. The value of experiment for legal practice must not be overestimated or their real value will be neglected. Judges should know experimental psychology, but practical is better.

R. Oppenheim,³ following Stern and Wreschner, showed thirty girls from ten to twelve, three well-known Walther colored pictures and then after one minute had them describe them spontaneously, and then afterwards look at them as long as they wished to see where they had made mistakes. When they had finished they were asked 50 questions on each picture. Forty-nine out of the 90 tests were correct, but the questions brought a far larger proportion of error. Many of the latter were suggestive and usually yielded only 75 per cent true answers. To test whether this process was educable it was repeated with due separations after an interval. Each repetition showed marked improvement, from which the author infers that memory needs training and can be improved. Some of the questions required estimates of time and the result showed that small intervals were very greatly magnified. The estimates of space based upon a question as to the size of the picture also were very far from the truth. In these tests children of the higher schools showed themselves dis-

¹ See abstract of Stern's work in lectures at Clark University. Amer. Jour. of Psy., April, 1910, vol. 21, pp. 270-282.

² Bedeutung d. mod. Forschungen über d. Aussagepsychologie. Zeits. f. päd. Psy., Path. u. Hygiene, vol. 9, pp. 417-444.

³ Ueber die Erziehbarkeit der Aussage bei Schulkindern. Beiträge z. Psy. d. Aussage, 1905, vol. 2, Heft 3, pp. 52-98.

tinctly superior to those of the folk-school both in spontaneity and truthfulness, but the pupils of the latter showed better results from training. The more gifted pupils did best.

A. Bernstein and T. Bogdanoff¹ tested 286 children from seven to fifteen years of age. Nine arbitrary, very distinct, but simple figures were shown, and after thirty seconds they were asked to identify these nine in a larger group of twenty-five also arranged in the form of a square, children of each age being tested separately. It was found that from eight to fifteen, correct identification increased with great steadiness from six to eight and one third of the nine, and the errors decreased, though slightly. Thus the accuracy of re-perception or memory improved during this period. This was also true for the passive tests.

O. Lipmann and E. Wendriner² asked children of six three sets of questions concerning one and the same object. The first question was without any suggestiveness; the second was expectative (Latin *Nonne* or *Num*); and the third was a question with a definite presupposition in it. The result showed that knowledge was reduced sixteen per cent and faithfulness of reproduction nineteen per cent by the suggestive questions, the boys doing better than the girls.

O. Kosog³ tested forty children of an average age of eight and one half years as follows: on a white card a small dot of ink was made and the pupil must retreat until it could no longer be seen. After this had been done three times, unknown to the pupil a paper with no ink spot was substituted. Hearing was tested by a tuning fork which could be heard when its handle was placed squarely upon a resonator. This was done at first, but later, unknown to the pupil, omitted. Smell was tested by pouring from a small bottle, which really contained water, into a glass of water and the pupils were asked what they smelled. Taste was tested in a similar way, and touch was tested with a feather, the pupils being requested to tell when they felt its touch. Out of 440 experiments suggestion succeeded in sixty-five per cent of the cases. Deception due to suggestion occurred for touch least often; then followed sight, hearing, taste, and smell, the last showing about twice the suggestibility of the first. Good pupils seemed more suggestible than poor ones, perhaps because they were more ambitious to show their power. There was little difference of sex and little effect of fatigue.

Scripture describes the first lie as the beginning of man's fall from paradise. Since then, says F. Kemsies,⁴ the lie has become

¹ Experimente über das Verhalten der Merkfähigkeit bei Schulkindern. Beiträge z. Psy. d. Aussage, 1905, vol. 2, Heft 3, pp. 115-131.

² Aussage-Experimente im Kindergarten, *ibid.*, pp. 132-137.

³ Suggestion einfacher Sinneswahrnehmungen bei Schulkindern. Beiträge z. Psy. d. Aussage, 1905, vol. 2, Heft 3, pp. 99-114.

⁴ Zur Einteilung der Lügen und Aussagen. Zeits. f. päd. Psy., Path. u. Hygiene, 1905, vol. 7, Heft 3, pp. 183-192.

universal for all races and ages despite the fact that it is everywhere condemned. Perhaps nothing is a better measure of the moral level of an individual or a race than the proportion of falsehood and truth in their lives. Many seem to be perjurers by nature, and any outrage upon truth is justified if it attains the end. The study of children's falsehoods has been in recent years undertaken in a comprehensive way, and now psychologists, teachers, jurists, and doctors combined are shedding much new light upon the subject, and many experiments and pseudo-metric methods are in use. The test of truth is in the degree of agreement between the objective thing or act and the subjective conviction. Kemsies devises an intricate diagrammatic method of indexes of truth and falsehood, twenty-seven in number, showing all the combinations between objective reality and conviction in order to determine which are really punishable and which are due to imperfect knowledge, inadequate or partial forms of expression, perception, errors, etc. He divides lies into the following ten groups: (1) Spurious lies in play, tricks, etc.; (2) errors in the form of statement; (3) errors of fact, including illusions of memory, judgment, perception; (4) exclusive lies from anxiety, embarrassment, flattery, and idle boasting; (5) lies with base motives, selfishness, defiance, envy, revenge; (6) those with noble motives, such as humility, self-sacrifice for others, or by command; (7) pure lie as a character fault; (8) the pathological lies of hysteria, moral insanity, epilepsy, and paralysis; (9) criminal lies, such as theft, counterfeiting, treachery, etc.; (10) lies of subnormal individuals. The powers of expression or statement can be systematically improved by practice and instruction. German writers have discussed at considerable length the question whether children can tell real lies before the age of four.¹ From this study it appears that children who simulate pain, to escape from something they desire to avoid, often really feel the pain in some degree, and that their souls are fields of both positive and negative illusions of memory.

G. L. Duprat² warns us against relying too implicitly upon statistics to determine the relative force of children's motives for lying. This author attempts the most elaborate classification yet made; first, of lies themselves into (a) affirmative, due to exaggeration, fiction, play, calumnies, and simulation, and (b) negative, such as saying "no," elaborate denials and dissimulation. He also recognizes attenuations of the truth, sophisticated lies, and those by individuals and groups. He then classifies the liars themselves. The affirmative class are imaginative and their lies may be marked by great inventiveness, by fraud, falsification; while the deniers are divided into those by habit

* ¹ Karl L. Schaefer: *Kommen Lügen bei Kindern vor dem vierten Jahre vor?* Zeits. f. päd. Psy., Path. u. Hygiene, 1905, vol. 7, pp. 195-201. See also Marcinski: *Zur Frage der "Lüge bei Kindern unter vier Jahren,"* *ibid.*, pp. 201-205.

² Une enquête psychologique sur le mensonge Bull. de la Soc. Libre pour l'Étude Psy. de l'Enfant, 1902, pp. 220-229.

and by accident. Yet more complex is his classification of the psychological causes and the principles of association which are involved. (a) Under the principle of invention he classifies lies of pride, boasting, cupidity, social and antisocial tendencies, enthusiasm, logism or illogism. (b) The negative causes are attenuation, fear, shame, and modesty, repulsion, antisocial tendencies, or depression and lack of generosity. Under pathological causes may be general, such as heredity, prejudice, custom, politeness, and fraud, or local, due to religious or political institutions, servilism, etc.

The following study was made under my direction in Boston in 1888.

For some years four accomplished and tactful lady teachers, finding in even the best ethical literature little help in understanding and in dealing with certain current and more or less licensed forms of juvenile dishonesty connected with modern school life, undertook, as a first step toward getting a fresh and independent view of the facts of the situation, to question and observe individual children, by a predetermined system, as to their ideals and practices, and those of their mates in this regard. These returns now represent nearly three hundred city children of both sexes, mostly from twelve to fourteen years of age, selected, generally, by the teachers as average or representative children in this respect, and interviewed privately and in an indirect way, most carefully designed to avoid all indelicacy to the childish conscience. From the nature of the subject, and from the diverse degrees, not only of interest, but even of trustworthiness of the individual returns, as well as from the fact that the experience and opinion of many teachers were also gathered, the results hardly admit tabular statistical presentation. A general statement of them, according to the groups into which they naturally fall, will be serviceable, it is hoped, to thoughtful parents and teachers as well as to psychologists.¹

I. No children were found destitute of high ideals of truthfulness. Perhaps the lowest moral development is represented by about a dozen children who regarded every deviation from the most painfully literal truth as alike heinous, with no perspective or degrees of difference between white and black

¹ I am indebted to Mrs. Pauline A. Shaw for the means to carry out this study and to Miss Sara E. Wiltse and her teachers for collecting data.

fibbing and the most barefaced, intended, or unintended lies. This mental state, though in a few cases probably priggish and affected, became in others so neurotic that to every statement, even to yes and no, "I think" or "perhaps" was added mentally, whispered, or in two cases aloud, and nothing could prompt a positive, unqualified assertion. This condition, not unknown among adults in certain morbid states of conscience, we will designate as *pseudophobia*, and place it among the many other morbid fears that prey upon unformed or unpoised minds. One boy told of "spells" of saying over hundreds of times when alone the word "not," in the vague hope it might somehow be interpolated into the divine record of his many wrong stories, past and future, to disinfect them and neutralize his guilt. Another had a long period of fear that like Ananias and Sapphira he might some moment drop down dead for a chance, and perhaps unconscious, lie. As in barbaric lands a score of crimes, though perhaps recognized as of different degrees of depravity, are worthy the maximal penalty of death, so inaccuracies of statement, though distinguished from blacker falsehoods, are still lies, though unintended. This moral superstition, which seemed mostly due to mixing ethical and religious teaching in unpedagogic ways or proportions in home or Sunday-school, is happily rare, generally fugitive, is not germane to the nature of childhood, and is likely to rectify itself. Where it persists it begets a quibbling, word-splitting tendency, a *logolatry*, or a casuistic habit resulting sometimes in very systematized palliatives, tricks, and evasions, which may become distinctly morbid. There are few children even at the beginning of public-school life who need much help in distinguishing between unintentional and premeditated wrong statements, and yet a little aid in so doing, if given with proper illustrations and tact, is almost sure to be serviceable in developing a healthful moral consciousness. Of this state we desire more records of cases with details illustrative of cause and cure, etc.

II. Strongly contrasted with this state, and far more common, is that in which lies are justified as means to noble ends. Children all admire burly boys who by false confessions take upon themselves the penalties for the sins of weaker playmates, or even girls who are conscious of being favorites

with teacher or parent, or of superior powers of blandishment, and who claim to be the authors of the misdeeds of their more disfavored mates. The situations, especially the latter, were met with many times, and the act was always approved though often with some rather formal qualifications. One case, which bore traces of idealization, was described in which the quality of the heroism was of almost epic magnificence, and the sin-bearer's gracious lie seemed to have quite passed out of sight. A teacher who told her class of thirteen-year-old children the tale of the French girl in the days of the Commune, who, when on her way to execution on a petty charge, met her betrothed and responded to his agonized appeals, "Sir, I do not know you," and passed on to death alone because she feared recognition might involve him in her doom, was saddened because she found it so hard to make her pupils name as a lie what was so eclipsed by heroism and love. Children have a wholesome instinct for viewing moral situations as wholes, but yet are not insensitive to that eager and sometimes tragic interest which has always for all men invested those situations in both life and in literature where duties seem to conflict. The normal child feels the heroism of the unaccountable instinct of self-sacrifice far earlier and more keenly than it can appreciate the sublimity of truth. Theoretic or imagined cases of this kind were often volunteered by the children with many variations. They declare, e. g., that they would say that their mother was out when she was in, if it would save her life, giving quite a scenic setting to such a possible occurrence, adding infrequently that this would not make it *exactly* right, though it would be their duty to do it, or that they would not tell a like lie to save their own lives. A doctor, too, many suggested, might tell an over-anxious patient or dearest friend that there was hope, easing his conscience, perhaps, by reflecting that they had some though he had none. In confronting such cases, it is the conscientious parent or teacher who is most liable to get nervous and err. It is feared, that although the end is very noble and the fib or quibble very petty at first, worse lies for meaner objects may follow. The fondness and even sense of exhilaration, with which children often describe such situations, is often due to a feeling of easement from a rather

tedious sense of the obligation of indiscriminating, universal and rigorously literal veracity, under which also very often lurks an effort to find the flavor of exculpation for more inexcusable lies. The teacher may by multiplying, analyzing, or even by too much attention to such cases develop a kind of morbid ethical self-consciousness and precocity. He may, as the history of education shows, make even children into casuists gravely disputing about the grand moral forces that beneath all others make the world of man their revelation or their sport. No two children and no two moral situations are alike. Here human science faces problems still too complex for formulation, where the adult has really very little to teach the child, and where conference and suggestion, and even instruction, should be restricted to specific and individual cases and not lapse into generalization. The special pedagogic utilization of these cases should generally, we believe, be the following. The child who gets really interested in what it deems the conflict of veracity with other duties, may be reverently referred to the inner light of its own conscience. This seems to be a special opportunity of Nature for teaching the need of keeping a private protestant tribunal where personal moral convictions preside, and which alone enables men to adapt themselves to new ethical situations or environments.

III. With most children, as with savages, truthfulness is greatly affected by personal likes and dislikes. In many cases they could hardly be brought to see wrong in lies a parent or some kind friend had wished them to tell. Often suspected lies were long persisted in till they were asked if they would have said that to their mothers, when they at once weakened. No cases were more frequent than where, in answer to a friend's question, if some thing or act they did not particularly admire, was not very nice or pretty, they found it hard to say "no," and compromised on "kind of nice," or "pretty enough," when if a strange pupil had asked they would have had no trouble with their consciences. The girls in our returns were more addicted to this class of lies than boys. Boys keep up joint or complotted lies which girls rarely do, who "tell on" others because they are "sure to be found out," or "some one else will tell," while boys can be more readily brought to confess small thefts, and are surer to own up if caught, than

girls. A question of personal interest with girls is how far etiquette may stretch truth to avoid rudeness or hurting others' feelings. All children find it harder to cheat in their lessons with a teacher they like. Friendships are cemented by frank confidences and secrets and promises not to tell, as adults with real attachments desire to know and be known without reservation, without overpraise or flattery, and to rely on and perform pledges. To simulate or dissimulate to the priest, or above all, to God, was repeatedly referred to as worst of all. On the other hand, with waning attachment, promises not to tell weaken in their validity. Strange children, and especially impertinent meddlers, may be told "I do not know" when one means "none of your business" as a mental reservation. Children say they are not going to a place they intend to visit to avoid unwelcome company, and victimize an enemy by any lie or strategy they can invent. Truth for our friends and lies for our enemies is a practical, though not distinctly conscious rule widely current with children, as with uncivilized and, indeed, even with civilized races. Rural children are more liable to long and close intimacies, and are more shy and suspicious of all strangers. The sense of personal loyalty to those who are admired is so strong that it has produced, not only many kinds and systems of fagging, but inclines children to mistake what pleases their idol as good and true. If their favorites desire or even permit them to lie or cheat for their benefit, as false codes sometimes require, if extravagant vows or protestations are made that cannot be kept, or that must be kept at great moral cost, or if too many secrets are shared that need often to be guarded by prevarications, then children are being trained for corrupt combinations of any sort in adult life. On the other hand, it is through the instinct of personal fealty, so strong in children that most men have grown up to a sense of fidelity to God and even of the obligation of scientific truthfulness. It has taken mankind long enough to learn the sublimity of a kind of truthfulness which is no respecter of persons. The best correction of this general tendency of children, we believe to be instruction in science, the moral needs and uses of which alone call loudly for more of it and better. But the teachers of younger children should look well to their friendships, and study, especially, the char-

acter of leaders and favorites and try to mold it as well as strive to be loved by all, not forgetting that only children with bad friends are worse off than those with none, and that they will be more faithful to great causes for having been faithful to dear and good friends.

IV. The greatest number of lies in our collections are prompted by some of the more familiar manifestations of selfishness. Every game, especially, every exciting one, has its own temptation to cheat; and long records of miscounts in tallies, moving balls in croquet, crying out "no play" or "no fair" at critical moments to divert impending defeat, false claims made to umpires, and scores of others show how unscrupulous the all-constraining passion to excel often renders even young children. In those games which attract wider attention, where sets of picked players are pitted against one another, and the prizes in local fame are great and immediate, dexterity in cheating is sometimes regarded as a legitimate qualification along with others, the only discredit being, as in the lies Spartan children were encouraged to tell, in getting found out. Lies of this kind, prompted by excitement, are so easily forgotten when the excitement is over that they rarely rankle, and are hard to get at, but they make boys unscrupulous and grasping. School life is responsible for very many, if not most of the deliberate lies of this class. Where the vicious system of self-reporting for petty offenses, like whispering, exists, children confess not showing their hands when they are guilty. If pressed to tell if they saw or did a wrong they lie, and add, perhaps, that it is very easy to lie to get out of school scrapes. Few will not give, and not many will not take prompts or peep in their books, especially if in danger of being dropped or failing of promotion. Children copy school work and monitors get others to do theirs as pay for not reporting them, while if a boy is reported he tells of as much disorder as possible on the part of others, to show that the monitor did not do his duty. As school work is now done, much of it is of a kind that can be bought and sold. One teacher in a large city stated that so much more than they could really do was required of her pupils that she and her teacher friends were now obliged, in order that their rooms should not be unfavorably reported, to rewrite the English

exercises of many of their pupils, to be copied again by them before being seen by the examiners who had no time to see the work in process of doing. This could hardly have been a lesson in honesty to the pupils. The long list of headaches, nosebleeds, stomach aches, etc., feigned, to get out of or avoid going to school, of false excuses for absence and tardiness, the teacher, especially if disliked, being so often exceptionally fair game for all the arts of deception; all this seems generally prevalent. This class of lies eases children over so many hard places in life and is a convenient cover for weakness and even vice. To lie easily and skillfully removes the restraint of the more or less artificial consequences attached by home and school to childish wrongdoing, and increased immunity always tempts to sin. The facility with which a whole street or school may be corrupted in this respect, often without suspicion on the part of adults, by a single bold, bad, but popular child, the immunity from detection which school offers so much more than home for even habitual lies of this class, as well as the degree of moral degradation to which they may lead, all point to selfish falsehoods—especially when their prevalence is taken into account—as on the whole the most dangerous, corrupting, and hard to correct of any of our species. Excessive emulations, penalties, opportunities, and temptations should of course be reduced, but it should be clearly seen that all these lies are at bottom, in a peculiar sense, forms of self-indulgence, and should, in the great majority of cases, be treated as such, rather than dealt with directly as lies. The bad habits they cover should be patiently sought out and corrected, for those who habitually do ill are sure to learn to lie to conceal it. The sense of meanness this slowly breeds must be met by appeals to honor, self-respect, self-control. Hard and even hated tasks, and rugged moral and mental regimen should supplement those modern methods which make education a sort of self-indulgence of natural interests.

V. Much childish play owes its charm to partial self-deception. Children imagine or make believe they are animals, making their noises and imitating their activities; that they are soldiers, and imagine panoramas of warlike events; that they are hunters in extreme peril from wild beasts; Indians, artisans, and tradesmen of many kinds; doctors,

preachers, angels, ogres. They play school, court, meeting, congress. If hit with wooden daggers in the game of war they stand aside and play they are dead. If they step on a crack in walking the floor, curbing, sidewalk, etc., they say that they are poisoned. Protruding spots of earth or land in pools or ponds, or at half tide in the bay, suggest the geography of a continent, and in one case, for years, Boston, Providence, West Indies, Gibraltar, Brooklyn Bridge were thus designated by all the children of a large school in their plays. In another, a dozen hills and valleys, rills, near by were named from fancied resemblance to the familiar mountains, rivers, and valleys of the geography. The play house sometimes is so real as to have spools for barrels of flour, pounded rotten wood for sugar, pumpkin chairs, cucumber cows, moss carpets, sticks for doors which must be kept shut, sometimes cleaned, twig brooms, pet animals for stock with pastures and yards, all the domestic industries in pantomime, toadstools, lichens and puffballs for bric-à-brac, while some older boy and girl may play parents with secret pet names, and younger ones as children, often for a whole term and in rare instances for years; all of this, of course, being almost always in the country. They baptize cats, bury dolls, have puppet shows with so many pins admission, all with elaborate details. They dress up and mimic other often older people, ride on the horse cars and imagine them fine carriages, get up doll hospitals and play surgeon or Florence Nightingale. The more severe the discipline of the play teacher and the more savage the play mother the better the fun.

One phase of this is exquisitely illustrated in the life of Hartley Coleridge, by his brother. His many conceptions of his own ego—e. g., by the picture Hartley, shadow Hartley, echo Hartley, etc.; his fancy that a cataract of what he named jug-force would burst out in a certain field, and flow between populous banks where an ideal government, long wars and even a reformed spelling illustrated in a journal devoted to the affairs of this realm, were all developed in his imagination where they existed with great reality for years; his stories to his mother continued for weeks; his reproduction of all he had seen in London, its theater, laboratory, and what he had read of wars, geographical divisions, in a large playground appro-

priated to his use—these all illustrate this normal tendency, but in a degree of intensity probably morbid, much resembling the pseudo-hallucinations of Kandinsky. Two sisters used to say, "Let us play we are sisters," thus making the relation more real. Cagliostro found adolescent boys particularly apt for his training to subserve the exhibition of the phrenological impostures illustrating his thirty-five faculties. "He lied when he confessed he had lied," said a young Sancho Panza who had believed the wild tales of another boy who later confessed their falsity. Sir James Mackintosh in youth after reading Roman history used to fancy himself the emperor of Constantinople, and carry on the administration of the realm, hours at a time and often resumed for months. These fancies of his never amounted to conviction, but doubtless excited a faint expectation, which, had they been realized, would have lessened wonder. Charlotte Elizabeth lived largely in an imaginary realm for years in her youth.

In some games like "crazy mother," younger children are commanded, or older ones stumped or dared, to do dangerous things, like walking a picket fence or a high roof, etc., in which the spirit of play overcomes great natural timidity; and by playing school with other mates, or perhaps parents, they are helped by the play instinct to do hard examples and other hated tasks they had scarcely accomplished in actual schools. The stimulus and charm of the imagination make them act a part different from their natural selves; some games need darkness to help out the fancy. It seems almost the rule that imaginative children are more likely to be dull in school work, and that those who excel in it are more likely to have fewer or less vivid mental images of their own. Especially with girls, it is chiefly those under ten or twelve who play most actively in our school yards, but those of thirteen or fifteen, who, under the apathy that generally affects girls of that age, walk in pairs, or small groups up and down the yard and talk, are no less imaginative. One early manifestation of the shadowy falsity to fact of the idealizing temperament is often seen in children of three or four, who suddenly assert that they saw a pig with five ears, a dog as big as a horse, or, if older, apples on a cherry tree, and other Munchausen wonders, which really mean at first but little more than that they have that thought or have made that

mental combination independently of experience. They come to love to tell semiplausible stories, and perhaps when the astonishment is over to confess. Or, again, all stories of men and things they hear are given a setting in the natural scenery, or far less often, in the houses they know best, and their friends are cast in the rôles. The fancy of some children is almost visualization, and a few will tell at once, e. g., what was the color of Barbara Frietchie's dress, whether she wore glasses and a cap, just where in their father's sheep pasture the goblin in the "Arabian Nights" rose out of the bottle, if pictures of these objects have not obviated the normal action of this faculty. Reverie which materializes all wishes, and the mythopœic faculty which still occasionally creates a genuine myth among children, boys who amuse their mates with long and often clever yarns of their own invention, girls who make up ridiculous things about others—to all these the school has paid little attention, and Mr. Gradgrind would war upon them all as inimical to scientific veracity. We might almost say of children at least, somewhat as Fröschammer argues of mental activity, and even of the universe itself, that all their life is imagination. Such exercise of their faculties children must have even in the most platonic school republic. Its control and not its elimination is what is to be sought in the high interest of truthfulness. The progressive degeneration of the school reader, and the simultaneous development of flash literature for the young, has had much to do with the growth of evil tendencies in this field. To direct and utilize, so far as it needs it, this manifestation of the play instinct, which, though sporting with lies so gracious and innocent, may lead to so many kinds of divorce of thought from reality and to self-deception, the whole question of how best to introduce the young to the best literature of the world, each kind and grade in fit time and proportion, must, we believe, be pondered, and to this problem we shall turn elsewhere. How much of this can best be appreciated in children, and, if its peculiar quality of fancy is once lost, must remain caviare to it, only those know who have realized in their own experience and observation how youthful minds find and play about the chief beauties of ballads, of Homer properly told in English, and of the radical conceptions and great situations in the choicest English writers, if only put

in proper form. Psychologically, imaginative literature is a direct development from this variety of play, and into this its unfoldment is natural.

VI. A less common class of what we may call pathological lies was illustrated by about a score of cases in our returns. The love of showing off and seeming big, to attract attention or to win admiration, sometimes leads children, e. g., on going to a new town or school, to assume false characters, kept up with difficulty by many false pretenses awhile, but likely to become transparent and collapse, and to get the masker generally disliked. A few children, especially girls, are honey-combed with morbid self-consciousness and affectation, and seem to have no natural character of their own, but to be always acting a part and attracting attention. Boys prefer fooling, and humbugging by tricks or lies, sometimes of almost preternatural acuteness and cleverness. Several, e. g., combined to make what seemed a very complex instrument, with cords and pulleys and joints, called an "electrizer." Boys not in the secret were told to press smartly on the knob and they would feel a shock, when there was only a hidden pin. This is the normal diathesis which develops girls into hysterical invalids, deceiving sometimes themselves and sometimes their relatives, on whom faith curers work genuine miracles, and which makes boys into charlatans and impostors of many kinds. It is hard for many to believe that certain women who fulfill their social and domestic duties creditably can, with such placid naïveté, relate long series of occurrences which they know to be utterly false, and that men they meet are indulging a life-long passion for deception, that they love the stimulus of violent ruptures with truth, or love lies for their own sake, as victims of other intoxicants love strong drink. The recent literature of both telepathy and hypnotism furnishes many striking examples of this type. Accessory motives, love of applause, money, etc., are at first involved, but later what we may designate as a veritable *pseudomania* supervenes where lies for others, and even self-deception is an appetite indulged directly against every motive of prudence and interest. As man cannot be false to others if true to self, so he cannot experience the dangerous exhilaration of deceiving others without being in a measure his own victim, left to believe his

own lie. Those who have failed in many legitimate endeavors learn that they can make themselves of much account in the world by adroit lying. These cases demand the most prompt and drastic treatment. If the withdrawal of attention and sympathy, and belief in the earlier manifestations, and if instruction and stern reprimand are not enough, there is still virtue in the rod, which should not be spared, and, if this fail, then the doctor should be called.

VII. Finally, children have many palliatives for lies that wound the conscience. If one says "really" or "truly," especially if repeated, and most solemnly of all, "I wish to drop down dead this minute, if it is not so," the validity of any statement is greatly reduplicated. Only a child who is very hardened in falsehood, very fearful of consequences, or else truthful, will reiterate "it is so anyhow," even to tears in the face of evidence he cannot rebut, while others will confess or simulate a false confession as the easiest issue. Only young children who mistake for truth whatever pleases their elders, or, occasionally those too much commended for so doing, find pleasure in confessing what they never did. To say, Yes, and add in whisper, "in my mind," meant No, among the children of several schools at least in one large city. To put the left hand on the right shoulder also has power, many think, to reverse a lie, and even an oath may be neutralized or taken in an opposite sense by raising the left instead of the right hand. To think "I do not mean it," or to mean it in a different sense, sometimes excruciatingly different from what is currently understood was a form of mental reservation repeatedly found. If one *tries* not to hear when called, he may say he did not hear, with less guilt. An acted lie is far less frequently felt than a spoken one, so to nod is less sinful than to say Yes; to point the wrong way when asked where some one is gone, is less guilty than to *say* wrongly. Pantomimed lies are, in short, for the most part, easily gotten away with. It is very common for children to deny in the strongest and most solemn way wrongs they are accused of, and when, at length, evidence is overwhelming, to explain or to think, "My hand, or foot did it, not I." This distinction is not unnatural in children whose teachers or parents so often snap or whip the particular member which has committed the offense. In short, hardly any of

the sinuities lately asserted, whether rightly or wrongly, of the earlier Jesuit confessionals, and all the elaborated pharmacopeia of placebos they are said to have used to ease consciences outraged by falsehood, seem reproduced in the spontaneous endeavors of children to mitigate the poignancy of this sense of guilt.

In fine, some forms of the habit of lying are so prevalent among young children that all illustrations of it, like the above, seem trite and commonplace. Thoroughgoing truthfulness comes hard and late, and school life is so full of temptation to falsehood that an honest child is its rarest, as well as its noblest, work. The chief practical point is for the teacher to distinguish the different forms of the disease and apply the remedies best for each. So far from being a simple perversity, it is so exceedingly complex, and born of such diverse and even opposite tendencies, that a course of treatment that would cure one form, would sometimes directly aggravate another. If we pass from the standpoint of Mrs. Opie to the deeper, but often misconceived one of Heinroth, and strive to realize the sense in which all sin and all disease are lies, because perversions of the intent of nature, we shall see how habitual falsehood may end, and in what, in a broad sense, it begins. A robust truth-speaking is the best pedagogic preparation for active life, which holds men up to the top of their moral condition above the false beliefs, false fears, and false shames, hopes, loves we are prone to. The effort to act a part or fill a place in life for which nature has not made us, whether it be school bred, or instinctively fascinating to intoxication as it is for feeble, characterless, psychophytic constitutions, is one of the chief sources of waste of moral energy in modern society; lies, acted, spoken, imagined, give that morbid self-consciousness so titillating to neurotic constitutions. The habitual gratification of all a child's wishes indirectly cultivates mendacity, for truth requires a robust and hardy self-sacrifice, which luxury makes impossible. Much society of strangers where "first impressions" are consciously made, favors it. Frequent change of environment, or of school or residence, favors it, for a feeling that "new leaves" can be easily turned arises. Frequent novelties, even of studies, probably cultivate one of its most incurable forms, viz., that state of nerves where

the first impression is strong and vivid and pleasurable, while repetitions are indifferent, if not soon positively painful; a condition which, but for multiplying the already large number of mild manias, might be called *neomania*. Children should be shielded from both the professional mendacity and the false exaggeration of the abnormal of the modern newspaper, and held to long and firm responsibility for their acts and words. When men or civilizations, yet capable of it, give up the lie and fall back to their best and truest selves, to be and to be accepted for what they really are by nature and heredity, one of the highest and most intense of all pleasures is realized, which, though narrowed and conventionalized by many religious and dogmatic systems, is very manifold and may appear as general moral reformation, new intellectual insights, emotional easement and satisfaction, greater energy in action, and perhaps even greater physical betterment in certain forms of disease in certain temperaments, and, in a word, is still from the standpoint of scientific psychology, not unworthy the grand old—but greatly abused term—Regeneration.

Why do children lie? asks N. Oppenheim¹ and he answers by saying that very many do it for no recognized reason, and it is generally thought to be an indication of spontaneous viciousness, but in most cases it is due to disorders of body or mind which interfere with the transmission of concepts or percepts from the internal to the external processes of expression so that they are unable to be more exact than they seem. Punishment confirms and aggravates these difficulties. Truth is not the only means of saving grace. The right physical and mental environment may cause a spontaneous reform in a liar. Any cause that makes for intellectual tenuity or a morbid nervous condition favors it. Teaching by rote, mechanical repetition and vicious stimuli that tend to a psychic poverty help it on. The right impression is side tracked and many people should no more be punished for lying than for color blindness. A faulty disposition which irritates, repressing normal or exaggerated abnormal impressions, tends to break up concepts. Eye troubles, catarrhs, hysteria, loss of appetite and sleep tend in the same direction.

Earl Barnes² says children lie because they cannot tell the truth, for truth involves knowledge. Their idea of truth is loyalty to persons. Egotism and contagion are sources of untruthfulness. In the

¹ Why Children Lie, Pop. Sci. Mo., 1895, vol. 47, pp. 382-387.

² Why Children Lie, Current Literature, 1903, vol. 34, pp. 213-214.

sixteenth century one hundred thousand people were put to death for witchcraft. Many of them and most of the witnesses were children, usually girls from twelve to fourteen. The Children's Crusade illustrated the same thing. If children misrepresent the truth it is a secondary symptom. They are timid, or want something. If you punish them you aggravate the difficulty. At three or four the child distinguishes well the lie from the truth. It can even play with fear and realizes what "for fun" means. Indeed, it would seem that by fourteen months this is well understood. Then it comes to distinguish with interest between what is truly real and what is not.

J. Trüper¹ says the lie begins in error. The general view is that it is innate. This view was held not only by mediæval theology, but by Roth in his ethics, and by Montaigne and Perez. It is described as a part of the selfishness of children. Every child, says Boudin, is a liar. Perez thinks the same, but ascribes it to the frequency with which children are allowed to see deception about them. The true view probably is that the newborn child has no moral quality, good or bad, and is therefore incapable of truth or untruth; is, in fact, not a moral being, but possessing only the possibility of becoming one. Fancy and egoism are the mainsprings of falsehood, and we may here observe Herbart's distinction between the faults the child makes and those it has. This makes truthfulness a matter of education. Jean Paul Richter says in the first five years children never speak truth or falsehood. They merely think aloud. Deception often begins with gestures and before speech is developed, although this opens to it a far larger field. Some children soon develop a great love of producing an effect, and if their imagination is brilliant, have thus an added temptation to lie, while cowardice, obstinacy, self-will and bad examples do their sad work. Sometimes with hereditary predispositions a lie is believed and may even become an hallucination. In treatment special effort should be directed to produce sincere regret.

J. G. Compayré² says children are not content with repeating what they have seen or heard, but they must invent or travesty. Perez³ says that even in the cradle we sometimes see infants disposed to dissimulation and ruse. Children have natural finesse and take to petty artifices because they are weak. Without being born so, they may become liars through the clumsiness of treatment by others. Their power of deception is sometimes incredible. Indeed, this is sometimes their only weapon in the struggle for existence. Their tenacity in

¹ Lüge. Rein's Encyklopädisches Handbuch d. Pädagogik, 1897, vol. 4, pp. 601-616.

² L'évolution intellectuelle et morale de l'enfant. Hachette, Paris, 1893, p. 309 et seq.

³ Bernard Perez, L'éducation morale dès le berceau, 2d ed. Baillière, Paris, 1888, 320 p.

their lies may be great. Pedagogically the teacher must know something of the genesis of the lie. Obscurity of ideas, high-sounding phrases, pretenses, jeopardize pure love of truth. All children need persistent training to and for it.

Many think that, as Tacitus said of the ancient Germans, good customs do more for children than laws do. Some believe that perhaps the chief task of the teacher is to enforce and evoke truthfulness, even at the expense of fantasy which often obscures the feeling for truth, perhaps most of all at the age of from eight to eleven. Liars often have extremely acute intelligence and may lie from a virtuous motive; but usually lies are to win more respect and esteem, to cover vice, to increase pleasure. Great and little lies must be alike condemned. The child's fancy is like the adult's dream. G. Lehne¹ deplores the fact that for years his daily playmate was a fancied Herr Luft. He was so real that he used to set a chair for him at the table; but he regards the nascent period of fantasy as dangerous. He would restrict even the use of Märchen, but not quite banish them and takes issue with Rein in this respect. Teacher and pupils would not live in hostile camps if there was complete trust and the lie of fear could be abolished. Indeed, just the punishment for real faults might come to have something attractive about it to pupils of a highly developed sense of justice. A lie to get things is perhaps worse than one to avoid punishment; and envy and jealousy are bad motives. The teacher should cultivate the nimbus of infallibility; should always keep his promises; should show in all his teaching, whether religious or scientific, a profound love of truth; should avoid casuistry and cultivate a strong passion for truth. Rhetorical arts are often injurious. Perhaps the greatest punishment for a lie is discovery and its consequent shame and the failure to secure the result aimed at. To make headway against the lying habit with the young we must under no conditions accept any form of the doctrine that the end justifies the means. Never alter the truth for any cause whatever, and do not pretend to know when you do not, should be school mottoes. Children have an exquisite sense for detecting the lies in their social environment, and these are very corrupting.

But these rather obvious and slightly platitudinous precepts are not enough and the time for regarding them as finalities is surely now past. Too exiguous insistence upon literal and inerrant veracity is not without grave dangers of moral finickiness and superficiality. As with most ethical ends, the best methods to attain them are indirect; and teachers who exhort to truthfulness, set the best examples of it, and condemn all forms of lying—and no more than this—are crude amateurs in this field and indeed, should be condemned as remiss if they do no more.

¹ Wie kann der Lehrer die Lügenhaftigkeit der Jugend bekämpfen. *Die Kinderfehler*, 1902, vol. 7, pp. 58-74.

Demoor, in his admirable treatise¹ thinks that muscle training is the most effective means not only of developing the brain power, but of cultivating honesty. He would have liars excluded from school, like those suffering from nervous or contagious diseases, and would form special classes for all those who cannot be subjected to the ordinary educational method but need special treatment. An active life, a richly furnished field of knowledge, full of things of absorbing interest that stimulate observation so that children are provided and will not have to fabricate experiences in order to get psychic room to live in—these will act as wholesome food does in reducing the propensity to have recourse to strong drink. Besides facts and science there must be plenty of good fiction, poetry, romance, myth, to feed the imagination in a legitimate way. The child must have access to an ideal world or its soul is smoldered and atrophied unless it can invent such a world of its own. Life about and in the child should teem with interests and not be void of excitements. Hence a juiceless curriculum, a prosaic diet of dead facts and dead rules and laws, monotonous drill, zestless, enforced drudgery, to escape which there are so many licensed but dishonest ways among children, crude teaching about the obligation of truthfulness that bottles up the fancy—these are direct provocatives of several of the different modes of lying. Finally, as the worst lies are to conceal faults, bad habits, perhaps vices, so that they may grow rankly in secret, everything that tends to prevent or eradicate such moral defects so that there is nothing which needs concealment, helps; so does the gratification of every legitimate wish, to forbid which is often a temptation to secret indulgence.²

¹ Jean Demoor: Die abnormalen Kinder und ihre erziehlche Behandlung in Haus und Schule. Bonde, Altenburg, 1901, 292 p.

² Beiträge zur Kenntnis und Kasuistik des Pseudologia phantastica von Anna Stemmermann. Allg. Zeit. f. Psychiatrie, 1907, vol. 64, pp. 69-110.

CHAPTER VII

THE PEDAGOGY OF SEX

the vast body of sex thought in folklore and how it permeates the ages to our children—The new epoch in sex psychology and pedagogy in Freud and the Mannheim Conference—The movement in Germany in literature, society, and the schools—Other countries—Progressive sterility of the Occidental nations—New radical theories of sex and family life—Use of the disease factor in sex pedagogy—Latest estimates as to the prevalence of these diseases in our land and others—The new duty of physicians—The place of eugenics in pedagogy—New views and theories of human breeding—Heredity—Stirpiculture—The new movement in keeping and studying pedigrees—Special pedagogy of sex before puberty with special reference to the Freud school—Relations of love and sex—The great strain of sex *éclaircissement*, especially for delicate girls—Periodicity—Difference between sexes—The pedagogy of self-abuse—Nocturnal experiences—Sex periodicity in young men—Bachelor men and women and race suicide—Late marriages—Nature of puberty—Chief stress laid upon long-circuiting and sublimation—Education for wedlock—Origin and function of shame—The psychology of pregnancy—Studies of one hundred mothers and one hundred fathers during this period—Definition of good fatherhood—How husbands and wives weigh each other by new standards when parenthood approaches—Parturition—The first sight and first cry of the baby—Nursing—Confessions of representative mothers.

THE most difficult, delicate, and at the same time the most important part of moral education is that which concerns sex—difficult because so complex and little understood, delicate because the facts in the field are so concealed by reticence, prudery, and lies, and important because conditioning the most vital interests of the individual and the future of the race. In the place of the old taboo and reserve, recent years have been marked by a new frankness, candor, and openness of mind, and by discussions more serious and more competent than have ever been known in the world's history. Science has shed a flood of light on the biological, physiological, and psychological

nature and manifestations of sex. Sociology has shown how it underlies national and racial weal and perpetuity. The progressive sterility of all the most highly civilized nations has called startled attention to the subject as perhaps the culminating aspect of the higher statecraft. Other special studies have shown how urban life, in which a constantly increasing proportion of the population of all cultured lands lives, makes a new and perilous situation for the young and increases their precocity. Special surveys have brought out the facts and figures concerning the prevalence of both vicious practices and of diseases; and school life itself is found not to be morally hygienic in this respect. Society is slowly awakening to a new consciousness in this new situation. The laws of heredity, now well made out in the general field of biology, are being applied to man; eugenic journals and societies are inaugurating hopeful lines of practical endeavor; and campaigns against various aspects of the social evil, diseases, and the pornographic element in literature, art, and the drama are being waged in the interests of the young. The vital relations between religion and sex are slowly being realized, and purity agencies are becoming wiser and more effective, so that our underlying moral concepts in this field are in the process of rapid transformation and enlargement.

Of all the cultivated classes in the community, educators alone remain not only timid and inactive, but uninformed and prone to the old easy way of ignoring the facts, repressing discussion, minimizing dangers, and sometimes reaffirming the *laissez aller* policy of the old days of ignorance concerning the dominion and pervasiveness of sex functions in the psychophysical constitution of man. Next to teachers, parents are probably, in this regard, most oblivious of facts and most apathetic and recreant in their duties toward their children. The clergy are at last very slowly being awakened to their duties here. Most anomalous, however, is the attitude of the large portion of the American press. While many dailies, weeklies, and even monthlies still print quack advertisements that are obnoxious to morals, and give great prominence to scandals and sensational and indecent divorce proceedings that are still more corrupting, some of them exclude by explicit office rules every report of medical and scientific publications,

meetings and conferences in which this topic is treated by experts, and where the main endeavor is to diffuse wholesome facts which old and young need to know.

The world has probably never known any such universal consensus as the present belief in education. To-day all classes and conditions of men in all lands believe in schools and teaching and acknowledge that in all fields knowledge is the guide to successful living and that ignorance is not only a disgrace but a weakness and a danger. In this one domain of life and in one alone—and that the most important of all—it would almost seem as if civilized man was afraid of knowledge, laid a heavy ban upon instruction and deliberately chose darkness rather than light. Teachers who have the rarest opportunities to observe have learned nothing and ignore the subject. Text-books on psychology and pedagogy rarely mention it, so that our children are generally educated as if they were of the neuter gender. The sex instinct is so ignored that schoolmistresses have been caricatured as regarding sex as “an indiscretion if not a positive impropriety on the part of the Creator.” Meanwhile the seeds of vice were never sown so plentifully. The diminution of hard physical toil by machines, the wastrel life and vicious example of the rich and idle and their gilded and usually degenerate offspring as if there was a direct ratio between leisure and sexual vice, common living rooms in the slums and precocity are keeping armies of young men from coming into their birthright and arresting them as underlings in the industrial world because, as Mr. Acher¹ has well shown, their vitality is burned out by the fires of lust—all these contribute. Every modern expert authority, without one exception that I can find, agrees that sex is the most imperious and all-pervading instinct in man; that nothing so conditions his individual and social life; that it supplies the strongest motivation to attain eminence, acquire property, found a home; that it makes art, science, altruism, moral and religious life which cannot be understood without knowing its primary and secondary qualities. It is strongly sexed men and women in the period of their maturity and vigor that have done most of the great and good work of the

¹The Psychology, Pedagogy, and Hygiene of Sex Development (in press).

world and done it because they were sexed, since nothing in the soul of man is so susceptible of transformation or has so many higher psychokinetic equivalents. For this reason nothing in us needs education and guidance in this plastic nascent period so much as this propensity which is most of all denied it.

We now know that sex life begins in infancy long before it has any localization in the erogenic zones; that its crethism may be stimulated by the pacificator or stoppered rubber nipple as early as the sucking age; that half a dozen other forms of what Moll calls "the detumescence instinct" may be cultivated unawares before it is directed toward or dependent upon other persons, that is, before the contraction stage unfolds—and this in boys and girls alike before anything formerly called sex makes its appearance; we know that adolescent males, a large majority of whom (Cohen thinks 95%) yield to some form of self-abuse, are usually tortured with morbid fears that even doctors (since Tissot, Lallemand, Voltaire, and the anonymous author of "Onania" who a century ago or more painted its effects in lurid colors) have too often shared and increased, when in fact not one of the many diseases once ascribed to this cause are due to it, save in those with strong hereditary predisposition toward these ailments. The psychic effects of this vicious practice due to ignorance may be bad enough, and psychotherapy performs many, if not most, of its greatest miracles by chirping up those under this obsession, so that it would be relatively ineffective but for nervous scares due to departure from conventional norms. We know too that young women suffer many, if not most, of their ailments of body and soul from perversions, interdictions of functional abnormalities in this sphere, from all of which early and happy wedlock would absolve them. We understand as never before the physical and psychic evils of promiscuity, also the very wide range of individual variations in the vigor and manifestations of this instinct even within the limits of normality. For each one of the above views one could easily cite scores of experts agreeing with none dissenting, and who urge with one accord that the psychological moment has fully come when the western world must be awakened to a renaissance both intellectual and moral in this domain.

To realize how much sex has occupied the minds of mankind one needs to be familiar only with the thoughts and language of sailors, soldiers, prisoners, students, and other classes of men more or less isolated from female society. Under such conditions conversation often reeks with obscenities of every sort almost as if there was some degree of sexual satisfaction obtained in this vicarious way, or as if enforced repression in these conditions of life overflowed into coarseness of speech. One needs also to scan the history and literature of decadent races in the stages of national decline or certain contemporary plays during corrupt periods. Sodom, Babylon, Pompeii, the later Roman Empire, became very corrupt, and so their literature and art abound in shamelessness of a kind that shocks modern ideas of decency. These things show at least how central sex may become in human consciousness. Moreover, we have now several systematic collections of folklore, customs, etc.,¹ that show that to-day in many, if not most, countries at least of continental Europe, there is an extended body of oral and sometimes written tradition so rank that it would in some lands to-day be a crime to print and circulate it. This matter, much of it, is of great age, having lived for countless generations from mouth to ear, for much was never printed before—this at least we infer from the close similarity of many of the ancient and modern data. Thus its persistence and currency almost parallels that of speech itself. Its copiousness and variety is amazing. There are erotic lexicons and idiotica showing how very numerous are the terms for every part, act, aspect and relation of the *vita sexualis*. There is often a rather surprising ingenuity in the construction of these usually quintessentially slangy vocabularies. There are very studied riddles, acrostics, anagrams, puzzles and poems ranging all the way from vulgar doggerel to more or less belabored and scholarly poems, dramas, tales, etc. (cf. Lord

¹ Anthropophyteia, Jahrbücher für folkloristische Erhebungen und Forschungen zur Entwicklungsgeschichte der geschlechtlichen Moral, herausgegeben von Dr. Friedrich S. Krauss. Leipzig, Deutsche Verlags-Aktien-Gesellschaft, 1904-09, 6 vols. See also Beiwerke zum Studium der Anthropophyteia, herausgegeben von Dr. Friedrich S. Krauss. Leipzig, Deutsche Verlags-Aktien-Gesellschaft, 1907-09, 3 vols. See also Kruptadia; recueil de documents pour servir à l'étude des traditions populaires. Paris, Welter, 1883-1907, 11 vols.

Rochester's abominable Sodom reflecting the indescribable corruption of the court of Charles the Second). There are figures of speech, jests, jokes, gibes, and every salacious form of wit which Freud thinks in its more original form took its departure from this domain. There are fables, also pictures, generally rude and scrawled on walls and perhaps retirades, but sometimes executed with much artistic skill, symbols in which this kind of psychosis is very prolific, yarns and *contes* that would put Boccaccio to shame, ideological designations grossly used, and suggestions that besmirch everything. In this inexhaustible mine, too, we find erotic dances, a field where invention has a very wide scope which it has made the most of and which, when taken together with seductive gestures and dress, make an important addition to every *allumense* agency. Moreover, there are coins that have to be secluded from modern numismatic collections, tattooing where the human skin itself has been used as parchment to inscribe almost everything that is gross—these things have been spun about every part of every organ—normal and abnormal—every stage, posture, aspect, condition and circumstance of sexual activity itself and every age of life. Such topics as menstruation, virginity, pregnancy, temptation, and even incest, perversions, every unnatural practice, pornography, sex diseases, abortions, preventives, even anatomical abnormalities and peculiarities are made the nuclei of accretions, new and old, almost always treated, too, which is perhaps worst of all, in a cynical and sometimes more or less jocular way. Not only sex but excremental functions also come in for their own large share of attention, which bears witness to the way in which this process impressed primitive and still affects modern man.

Thus all this painful and all too voluminous section of anthropology shows by unmistakable documentation how close sex has been, and still is to great groups and classes of men perhaps the topic of most absorbing interest, occupying and in a sense stimulating a vast amount of mentation, a theme of perennial zest, of incessant conversation, a kind of sinister folk muse, inspiring a low but profuse kind of productiveness as well as presiding over the transmission of story roots galore, endlessly varied, now refined and now crassified in form.

Much of the grossest of this stock material is reproduced in sometimes more, sometimes less sublimated form in club anecdotes or even in the literature that Anthony Comstock burns by the ton. From this point of view again we can realize how sex must have been and still is perhaps the chief apperception-organ of no very small proportion of mankind. Indeed, it is hardly less than startling to realize how widely minds of this type can to-day see sex in everything and how clever they are in devising ways and means of diffusing sex suggestion even over the objects and processes of nature and all the leading activities of human life no matter how remote from it. It is a remnant of the same psychosis that produced the old phallic religions.

Now this material percolates through all ages and strata of society as by constant seepage. From it come the obscenities that it is so impossible to eliminate from the environment and the lives of our children to-day on the streets, in the schools, and back alleys. Its virus may be more or less attenuated, and it affects some individuals more and some less acutely. Even worse, probably, than the smutty words and images themselves, are the spirit and attitude, that come from this old prehistoric source, of levity in considering, and disrespect toward, the organs and functions connected with the sacred office of transmitting human life. This ancient lore is rank with contempt for woman, body and soul, and with gross misrepresentations of her very nature. Nearly all of it represents her as at heart sensual, passionate and lustful, but hypocritical, always ready to be false to any view or duty if opportunity offers, vying with man in bestiality but, unlike him, past master in all the arts of ruse, deception, simulation, dissimulation, and conventional propriety. If these disguises and pretenses can be broken through and with safety and security from exposure, she is represented as usually ready to abandon herself to any degree or any kind of excess. It is this idea, then, that is one of the now most corrupting derivatives of this noxious, teeming mass of folk tradition that has survived from the worst ages of the worst nations of ancient and modern times and which is passed on to our children to-day in direct line of continuity and communion with the most corrupt heathen and pagan races, to whose smut-lore our offspring are now exposed by contagion

from their play- and school-mates. It is absorbed because they are in the same developmental stage in which it grew and thrived in the race, each chief epoch and feature of which they therefore tend so strongly to repeat, at least *in petto*. They are happily usually, at least on their first exposure to it, innocent and naïve. To prevent them from sinking too deep into this quagmire is one of the most difficult tasks to-day. The virtue of a young boy is thus by these antique hereditary associations closely bound up with this respect for the female sex. And it is precisely here that current vulgar sex lore soaks in through the associations of middle and later adolescent years and gets in its most effective work of subtle disenchantment and depreciation of the best things in woman.

But corrupting as this now is morally, its very devil's-dreck is also extremely instructive scientifically because it shows us how possible, if not inevitable, it was for mankind at a yet more primitive and naïve stage of its development than history records to sexify everything in nature and in the whole domain of human experience. What we have considered above is the detritus of a great movement upward which decent men and races have achieved by suppression and sublimation. The better ethical consensus of man has long tabooed all this and striven to eliminate and purify the processes of reproduction by higher esoteric interpretation and by spiritualizing the master passion of love. Religion, especially, as well as civilization, knowledge, the arts and social institutions have perhaps not infrequently made their very best contributions toward this end, which generally needs supreme endeavor. Thus these things are the gold of which the old grossness is the dross—the one the food, the other the garbage, of culture.

But spiritualization is hard, and the lusts of the flesh are the most formidable of all man's foes. The struggle has been long and bitter. Perhaps, although its traces are so largely eliminated and have to be reconstructed from fragments, it has been the greatest of all the achievements of culture history. Within recorded ages it has made ascetics and celibates out of virile men who throbbed and tingled with passion, but fought Apollyon through it all to victory. By struggles, vows, prayers, falling and rising again, defeats and victories, the various

rites, regimens, ceremonies, flagellations, pilgrimages, self-mutilations and even castrations, in this field, as it is now being reconstructed from so many scattered and fragmentary sources, man has for untold ages toiled, struggled, fought and battled with his desire and yearned and striven upward. Probably not even his long conflict with higher animals in some Troglodyte stage, when it long seemed doubtful whether he or they would be lords of creation, has left so many marks and traces of its severity upon his nature as this. Indeed, there is something not only mysterious, but sublime in contemplating the history of a creature who was thus dowered with a body of death and a soul of light and who was always lapsing but always starting on again and through long ages making a little advance, but at terrific cost, since all the stirps, tribes, and nations that have perished from the world have done so because they failed to solve hygienically aright the great problem of sex, or how most effectively to transmit life. Surely, man must have had at the very core of his being some potent but benign *nisus* that impelled, at least the chosen remnants of his race, to forge up this stony and laborious way of the cross. We all of us and perhaps especially women, but most of all those of them who have not completed the highest stages of human development, carry in our natures the mementos of this struggle in the form of lurking anxieties liable to emerge upon occasion and becloud and perhaps often dismalize life into multiform types of neuroses and hysterics.

Now, it is into this great conflict that the child enters long before he is aware; indeed, inhibition perhaps begins with the first reproof for interest in the organs of sex and the processes of elimination from the body of both kinds in which, true to the tendency of ontogeny to repeat phylogeny, there is a stage and phase of intense curiosity and interest. From this stage of racial history, developed scatological rites, ceremonies and religious superstitions; and we have here the *cunabulum* of various other apperception-organs, without which many themes in mythology cannot be understood. Perhaps it began still earlier by attempting to evoke a sense of shame and modesty in the child concerning his own nudity which, by a law of nature, he has periods of desiring by a very strong instinct animated by a very ancient momentum. And thus

the child is launched upon the long process of repeating the greatest psychophysics strain to which man was ever subjected in the subordination of elements directly or indirectly connected with sex to higher powers of control. Afar down in the soul where consciousness will perhaps never penetrate, the reverberations of this old warfare rack, toss, and perhaps almost tear the soul asunder. Many psychic and physical factors now not recognized as sexual were so once, and it is especially this that seems by a very interesting and yet to be studied law in process of gradual elimination by coming ever earlier in the life history of the individual. Some were once primarily, others perhaps secondarily, sexual in their nature. What mature person who has the very rare power of remembering his own experience when life was hottest, or who has enjoyed for years close intimacy with many young men of sedentary or student classes, has not acquired a profound sense of what a storm and stress many, if not most, of them must now pass through as conscience and reason struggle with sense for the control of their lives, and when the imagination is haunted with visions of Walpurgis night scenes that it is almost impossible to exorcise.

In view of this situation, it seems best, before setting forth the pedagogy of sex, to enumerate briefly some of the new movements in the field, that we may realize how serious, competent, and widespread is the present campaign for the sexual betterment of the rising generation and how grave is the present need. We begin with *Germany*, where most has been done and where long ago pedagogues like Salzmann, Basedow, and others, like Rousseau, in France, demanded sex instruction in school. Several comprehensive surveys had shown an alarming prevalence not only of sexual immorality among youth, but of disease. A large and influential society was founded which publishes a journal, now in its eighth year.¹ The third congress of this society held in Mannheim, May, 1907, was devoted solely to sex pedagogy where the cultus ministers of Prussia and Bavaria were represented and the quality and number of attendance and the interest shown ex-

¹ *Zeitschrift für Bekämpfung der Geschlechtskrankheiten*, edited by Dr. A. Blaschko. Barth, Leipzig, 1903 to date.

ceeded all expectation. There were nineteen papers presented by eminent physicians, educators, and others, many of which were discussed, and the entire proceedings are printed in a stately volume of 321 pages.¹ Among the chief topics were sexual instruction in home and school, the nature of the sexual awakening in adolescent youth, sexual dietetics, instruction of teachers and parents, etc. The clearest and most unanimous result of the congress was a deepening sense of the all-conditioning importance of normal sexual life for racial permanence, national growth and prosperity, and for both personal and public hygiene as well as for morals and religion. The magnitude and complexity of the subject, the need of coördinating the now too isolated and partial view point of physicians, students of eugenics or stirpiculture, the home, school, church, etc., so that the pooling of present knowledge and methods of meeting the evil and the practical getting together of all the agencies from purity societies to medical experts in venereal diseases, those interested in legislation to control prostitution and those who study reproduction from the biological, selectional, and psychological point of view, was profoundly realized. There was a deep sense of the growing magnitude of all the evils and the dangers now impending with the rapid increase of urban life and with the extremes of poverty and luxury, and a sense that more must be done at once and in the schools, despite the fact that the pedagogy of the subject is still undeveloped.

There was great diversity of opinion, however, concerning just when to begin, what to teach at first and last, how to teach, who should teach and how far to go. Not a voice dissented from the conviction that something must be done without delay for upper secondary school classes and for academic youth. All agreed, too, that some instruction *ought* to be given early and in the home, although it was generally granted that the vast majority of parents could not or would not perform this duty and that they must be taught where possible, and that at all events this theme should be made an integral part of the course of study in all normal schools.

¹ *Kongress der deutschen Gesellschaft zur Bekämpfung der Geschlechtskrankheiten, Sexualpädagogik.* Barth, Leipzig, 1907, 321 p.

Fear was often expressed that physicians with their terrible array of the statistics of vice and their horrible portrayals of diseases would be liable to excite morbid fears and also that they lacked knowledge or appreciation of the delicate normal processes of sex *éclaircissement* in the pubescent and adolescent soul and could not appeal sufficiently to the potent factor of honor, shame, personal and moral responsibility to self, society, and posterity, the sense of duty and the need of strengthening the will and the powers of choice. Yet nearly all members wanted the physician's authoritative voice heard by all boys at least in the later teens, and not a few would supplement his teachings by other agencies, and still more demanded that girls be taught by women physicians. All that shocked, caused depressive discouragement, loss of self-respect or courage as sex fanatics often do in their allusions to self-abuse, all characterization of perversions and unnatural practices, lurid descriptions of the results of onanism (often worse than the vice itself), and all detailed descriptions of diseases or too suggestive and objective illustrations of sexual processes or organs and, above all, premature enlightenment before the age of curiosity and understanding, were deprecated; and forcing this kind of knowledge upon the immature, undeveloped souls was compared to forcible defloration which makes directly for precocity. We must follow natural interest and curiosity, giving just what is wanted or needed at each stage and no more; and to that end we must study more carefully just how and in what order the long, complex processes of sex illumination occur. Several essayists laid great stress on beginning early with the fertilization of plants and proceeding gradually to the lower animals and making the first stages of instruction incidental to biological teaching which should be more taught in general for the sake of the opportunity it affords to teach sex indirectly, and thought that even in normal schools this topic should be only one chapter in general hygiene and stand beside such themes as alcohol, tuberculosis, body-keeping and good habits generally. Sex *Aufklärung* to be complete must have not only a scientific, physiological, prophylactic, but an ethical and religious side, and teach the nature and sanctity of marriage, the family and all its relations to natural selection

and its irradiations into the positive form of art and idealism, along with its negative side of censure and punishment which reprobates all nastiness or suggestiveness of word or act—all these are needed. School work in this field should advance slowly enough to go surely, for extremes might only cause a revulsion of public sentiment against the topic, and a retreat after a fair beginning would be disastrous. One speaker urged the importance of a carefully prepared canon of reading for adolescents which should contain some healthful love poems and stories that presented the tender passion at the right age in a pure, ideal and heroic way, holding that this would be a corrective both of the gushy sentimentality to which girls are liable and the grossness of boys and would fill the fancy and imagination with noble images and would thus tend to counteract the evil. It was urged that there should be some sex differentiation in all lists of books advised for boys and girls and several called for concise booklets and pamphlets on sex for youth of a kind which do not yet exist. There were many reports of lecture courses given in the schools of different cities and all without exception had been welcomed by pupils, and commended by parents and teachers. While instinct guides animals aright, man needs not only the awakening of sympathy and feeling of charity, but especially everything that strengthens the will, for only it can make instruction or high ideals of any worth. Hence everything that stimulates volition (for if it is weak, life grows dull), or that hardens resolve to oppose sense and passion should have about the first place of all in a comprehensive scheme of sex pedagogy. If this subject is isolated too much there is always danger of stimulating this instinct, if the intellect is chiefly addressed. Hence character building, which involves firm convictions and settled habits of thought, feeling and will, is in general the surest prophylactic. Hints have their place at the right moment and a very important one, but are not sufficient. The hardening of the body is indispensable and every kind of physical exercise and active objective life helps.

Other points discussed were whether in gymnasia the instruction should be given in *ober secunda*, *unter prima* or to those about to graduate only; whether parents should be asked, told, or permitted to attend if they wished to; or whether their permission should be

asked; whether the teaching should be after school hours or compulsory; whether the regular teachers should be consulted; whether any stage of instruction should be thorough, systematic, and examined on or only sketchy. Most thought great stress should be laid on the sense of duty and the function of choice, that little reference was necessary to the sex act itself or to precautions against contagion, to the needs of promptly consulting physicians on occasion, to the detailed accounts of disease, that parents should not be present, that male physicians should not teach girls (an experiment tried by Heidenhain at Steglitz, but later forbidden), and that the widespread error that use of the function was needful to its conservation should be combated. It was brought out that teaching had been officially authorized upon this subject in the high schools of Switzerland with excellent results, that young male teachers beginning their duties in great cities are in great danger of contamination themselves, that (as Blaschko's statistics show) university students in Germany led all other classes in the percentage of venereal disease, that at the university of Bonn attendance upon instruction on this subject was required of all the members of the philological seminary, which is the nursery of teachers of the ancient languages.

The Natural History Conference held at Stuttgart a little later in 1906 authorized a memorandum advising that instruction on this subject in school be general rather than detailed and come near the close of the school period. It is feared that the imagination of the innocent will be injured by much class instruction. Leaflets, however, are recommended which can be utilized together with instruction for those individuals whom teachers deem in need of it. This instruction should not be very detailed but should (a) emphasize the importance of procreation for the welfare of posterity and should be made a matter of high ethical responsibility; (b) it should teach that indulgence is by no means a physiological necessity but that large numbers of the greatest and best men have abstained during their lifetime without injury. The dangers, too, of extra-marital relations should be taught. The peril of illicit relations for morals and for health and the nature of the two chief diseases should be inculcated.¹ The great majority do not know how or what to teach. For such a

¹ A. Forel: *Die sexuelle Frage*. Reinhardt, München, 1905, 587 p.

F. Siebert: *Ein Buch für Eltern*. Seitz, München, 1903-4, 3 vols.

H. Wegener: *Wir jungen Männer*. Langewiesche, Leipzig, 1906, 216 p.

Die Tätigkeit der Unterrichtskommission der Gesellschaft deutscher Naturforscher und Ärzte, hrsg. von A. Gutzmer. Teubner, Leipzig, 1908, p. 218 *et seq.*

A. Fournier: *Was hat der Vater seinem 18-jährigen Sohne zu sagen?* Aus dem französischen übersetzt von Dr. C. Ravasini. Dietz, Stuttgart, 1905, 32 p.

Bastian Schmid: *Gedanken zur sexuellen Pädagogik*. Zeits. f. lateinlose höhere Schulen, 1905-06, vol. 17, pp. 99-303.

In Natur und Schule: Teubner, Leipzig, 1906, vol. 5: a. H. Most: *Zur sexuellen Pädagogik*, pp. 40-42. b. M. Kleinschmidt: *Die sexuelle Frage in der Erziehung*

few very brief manuals suggesting methods, matter and gradation are now provided and more are needed. I know nothing in English quite as good as the following in German, one or more of which should be translated. They are: *Die geschlechtliche Aufklärung in Haus und Schule*, von H. Fürth; *Eine Mutterpflicht*, von E. Stiehl; and *Beim Onkel Doktor auf dem Lande*, von M. E. G. Oker-Blom. Konrad Höller: *Die sexuelle Frage und die Schule*, Leipzig. See also C. R. Henderson: *8th Year Book of the National Society for the Study of Education*, 1909. Also Helen Putnam, *Boston Medical and Surgical Journal*, Jan. 21, 1906. Also Moll: *Die sexuelle Erziehung*. Zeitsch. f. päd. Psychol., December, 1908. The younger the child the less fitting it is to rely upon the family physician or the pastor, who is more remote from the family circle.

Although instruction in sexual hygiene is not yet incorporated into the official programme of Germany, Düsseldorf, Leipzig, Dresden, and other cities have tried such courses for graduating classes for the *Gymnasien*, *Real* and *Bürger Schulen* by carefully selected physicians with the best results, as testified not only by attendance but by general expressions of deep interest and profit from the pupils. So successful have these courses been that it is now proposed to extend the experiments to the upper classes of the *Volks-Schulen* and *Fortbildungs-*

des Kindes, pp. 70-78. c. F. Siebert: *Die sexuelle Frage in die Erziehung des Kindes*, pp. 150-159.

Pubertät und Schule, by A. Cramer. Leipzig, Teubner, 1910, 16 p. Also *Studies in the Psychology of Sex*, by Havelock Ellis, vol. 6, *Sex in Relation to Society*. Philadelphia, T. A. Davis, 1910, 656 p. Also *Das sexuelle Problem und seine moderne Krise*, von E. Mertens. Munich, Kupferschmid, 1910, 476 p. Also *The Sexual Life of Woman*, by E. Heinrich Kisch. Authorized translation into English by M. Eden Paul. New York, Rebman Company, 1910, 686 p.

Werkblatt zur Handhabung der sexuellen Aufklärung an höheren Unterrichtsanstalten. Entworfen von der Unterrichtskommission der Gesellschaft deutscher Naturforscher und Ärzte. Überreicht der 78. Naturforscher-Versammlung in Stuttgart, 1906. In *Zeitsch. d. deutsch-evangelischen Vereine z. Förderung der Sittlichkeit*, 15. Januar, 1908, 22. Jahrgang, Nr. 1.

For a typically radical method see that of a well-known German teacher, Maria Lischnewska from Mannheim (*Die geschlechtliche Belehrung der Kinder; zur Geschichte und Methodik des Gedankens*. Mutterschutz, 1905, vol. 1, pp. 137-170) who has composed a very methodic course in sex instruction which begins in the third school year and which starts from the impregnation of the barnyard fowl, which must be presented in "anschauliche Weise," and exhibits a picture of the child in its mother's body "which every school must have." In the fifth and sixth school year the process must be presented in cattle and the sex organs must be exhibited "in simple drawings," and finally, in the seventh and eighth school year the process in man must be also presented object-lessonwise.

Schulen. In Helsingfors at the instigation of Dr. Oker-Blom, such instruction is now given to the upper classes in girls' schools just before graduation by lady teachers especially trained for that purpose.

The Prussian Cultus Minister has issued a request for information concerning the "scope and kind of instruction on sex given at the present time in schools, where and in what places it is given and by whom." In the returns, these methods fall into three groups: (1) instruction based on purely ethical grounds or upon the seventh commandment; (2) physiological instruction (*a*) concerning healthful sex life and procreation and (*b*) morbid manifestations of this function. The results of this inquiry which was issued only in the fall of 1907 have not been published.¹ Meanwhile, in some parts of Germany beginning with Breslau, since certain recent charges against the morality of the army, such instruction has been given to officers who are thereby qualified and exhorted to pass the instruction on to the soldiers under their command, and the Prussian Minister of War has authorized such lectures elsewhere. The interest and advantage of these courses is highly prized and praised by the officers themselves. Not only are the troops greatly profited and to some extent safeguarded during their term of compulsory service, which is now made as educative as possible in this and other ways, but officers are exhorted to be teachers and to feel more responsible for the hygiene and morals of those under their command. It is stated that when soldiers now go home they are proving effective propagandists of better knowledge, each in his own circle of family and friends.

D. Sarason, of Berlin,² urged that nothing can exceed the importance of normalizing man's sexual instinct which is the basis of human well-being and that during the critical years of youth this kind of training should take precedence of everything else. The instinct that dominates this field is, however, so imponderable that analytic methods of treating it are dangerous so that its proper pedagogy must be something quite unique without following at all the educative methods in vogue in any of the current courses of

¹ *Zeitsch. f. Kinderforschung*, Oktober, 1907, p. 28.

² *Zum Problem der Sexualbelehrung. Zeits. f. Schulgesundheitspflege*, 1907, vol. 20, pp. 733-746.

public education. The instinct must be treated not merely as a propensity but as containing the promise and potency of most that is best in the individual and social life of man. Nature has screened it with mystery, awe, modesty, and if that delicate texture is torn ruthlessly away, then like the unveiled statue of Sais, horror is revealed. (a) When should instruction begin? He answers that in a precautionary and negative way it cannot possibly begin too early, for everything in the life of the youngest school child that tends toward premature or overdevelopment of this part of his nature should be carefully prevented. In pubescent years, instruction should be only elementary and also chiefly preventive and sex dietetics should cover the entire life of the child and therefore be largely out of school. For parents to do this, however, would require a moral and religious regeneration of the entire German people and altruism and self-sacrifice like that seen in the sixteenth and again in the last half of the nineteenth century. Now, however, we must look chiefly to the school and here fight sexual ignorance just as we do illiteracy. (b) Who shall give such instruction? For elementary classes the teacher should be trained to do so and the physician should be reserved for older children and for those leaving school. Every pupil in higher secondary institutions should be required to take such a course. Not one should be exempt. Both instruction and attendance should be legally obligatory. Medical schools should open brief lecture courses to train young physicians to give such instruction that the teaching be effectively and comprehensively given perhaps in relation to temperance and hygiene, rest, fatigue, work, exercise, food, sleep, clothing, etc. (c) How should it be taught? Briefly, in connection with a sense of honor and responsibility and not as a course apart and *sui generis* till puberty. The details of what to teach, how far, how, ought to be discussed and determined. Hence, monographs like Kraepelin's should be multiplied and prizes offered by members for suitable curricula and syllabi.

In 1905 a group of German savants under the lead of Helena Stöcker, Ph.D., founded a monthly journal (*Mutter-schutz*) to alleviate the state of mothers, married or single, who were in dire distress. They studied the status of the wives of the poor, those with cruel or criminal husbands, and of the unmarried, who during pregnancy and in childbirth suffered physical and mental hardships. Here they found under modern conditions some of the saddest and most tragic aspects of civilization. As these results proceeded they realized more and more clearly that vast and complex legal, economic, social and moral problems were involved, but they also found that all the norms for all the reforms needed must

be those which spring from the needs of the children and that even the protection of the mothers must be for the sake of their offspring. Hence after three years the focus of their endeavor was changed, and in January, 1908, the journal took the name of *Die Neue Generation*, and its scope was enlarged.

What is the real programme of this group of very earnest, able and scholarly women and men who thus boldly address themselves to the profound and delicate task of revising all the relations involved in this holiest of all functions of transmission of human life? First of all—apologizing to these German reformers that such a statement is necessary in this country—those responsible for this movement are to the best of our knowledge and belief of the very highest and most stainless personal reputation, according to all the standards of the strictest existing moral codes. No breath of suspicion, even by their many and bitter critics, has ever been suggested against the purity of their lives, and they would abhor no less, if not more, than their critics, anything approaching free love in the sense in which that term is understood here. We say this at the outset because of the inveterate tendency to suspect lurking apologetic motives to justify inclinations for individual indulgence, present or prospective. Of the disinterested and philanthropic motives that animate this movement there can therefore be no question. In matters that touch the human heart perhaps more deeply than any other these people strive to maintain a cool, judicial attitude, and to be not only dispassionate but almost academic, without having any of the aloofness that this term sometimes suggests from the hard, bitter, yet ominous facts in this field.

What are these? One is that a large proportion of healthful women in the child-bearing age—Dr. Stöcker says one half in Germany—are now living either in celibacy with all the wifely and motherly instincts repressed and it may be perverted, or in prostitution, open or clandestine, or in relations involving infraction of the existing laws of marital fidelity. Many of them bear illegitimate children with all the psychic pain and stigmata this now involves, or are divorced or abandoned wives. This fact, they believe, justifies them in concluding that marriage as it exists to-day, and especially for

this large and perhaps growing proportion of the community must be remodeled to fit life. The interests and virtue of posterity are primarily concerned and yet inveterate customs and legal and religious sanctions of the existing status of wedlock make the community more sensitive to every hint of modification of this than of any other institution or relation of life, fearful lest changes here would involve more or less concession to passion.

How, then, can this stupendous and delicate task best be approached? The answer offered is, first, by a deepening and refining of the moral sense and making the responsibility involved in parenthood the supreme consideration. We must go back of laws and rights and ask what principles underlie matrimony and what are the chief ends it was established to accomplish. This is summed up in the phrase "responsibility to the unborn." This must be the touchstone by which the soundness of all opinions discussed and the practical value of all changes made must be tested. Every father must feel and exercise the fullest responsibility for his children during their entire period of immaturity. To shirk this, and especially to throw it upon some helpless victim of his passion, is the essence of dishonor and scoundrelism; this being granted, very much is assured, for it would inconceivably elevate the status of sexual morality. Again, woman must be given an independent financial status as well as education, for only when both sexes are thus matured, intelligent, of like social standing and free, can the best results be assured. They would, however, have all lovers eroticists of the ideal. Divorce should be made easier for those who are mismated. It is inevitable so long as marriage is so ill-considered and so often based on passion. One of the first and surest signs of degeneration in a stirp or race is want of wisdom in choosing mates; and the best sign of the perpetuity of a race is the unerring instinct that finds out and cleaves to the right party with true affinity of body and soul; for this alone is true marriage, because only under such conditions are the best children produced and reared. There may even be conditions where unions have been sanctioned or unsanctioned by the State or Church, in which childbirth is definitely renounced in advance in the interests of posterity; but of this little is said.

Thus this journal does not scruple to discuss even the preventives now used throughout the world, savage and civilized, and abortions in both their medical and social aspects. Perhaps its chief sympathies, however, are for women who have been deserted, for those who are the victims of midwives and quacks, who are infected by their husbands, forced to bear too many children, the incessant temptations to which girls and young women are exposed. Indeed, these topics are discussed not only by the large and influential society above referred to, but they find place now in some German pedagogical journals such as *Die Neue deutsche Schule* which has developed one of the sanest of all schemes of sex instruction in schools and would chiefly stress purity and cleanliness, would divine and answer children's curiosity and particularly would strengthen the will and invest the whole topic of sex and reproduction with mystery and with religious sanctity, holding that the present evils are due more to weakness of will and sense of duty than to ignorance. The instinct of shame should be especially guarded.

The arts of the temptresses, the careers of the great courtesans of history, fiction and the drama, are studied for the fuller light they throw upon the social evil. To orphanages and homes for abandoned children—their support, spirit, etc.—some space is given. Obscenity is to be warred on and banished as now; but the nude in high art can perhaps be encouraged in the interests of morality. One extremist advocates occasional gymnastic exhibitions without clothes, where the young people shall expose themselves naked to the others of their sex in the interests of body culture. The human form, he holds, will thus be developed by persistent exercise and the misshapen physique of the modern boy or girl will be greatly improved. No one advocates trial marriages; but some would have all bachelors of means, beyond a certain age, if they produce no adequate justification of their selfishness in remaining single, taxed. Woman's industry in its relations to maternity is a line of active agitation. So, too, is the method, matter, and age of sex education. The psychology and ethics of celibacy and abstinence are discussed, and the evils of the latter, particularly for women, are shown. Motherhood should be made a vocation, and each girl should be prepared for it, whatever other education she may receive. So different are men and women that the sexes might be called two nations of very diverse stock living together, but nevertheless with a good deal of ignorance of each other. Our present morality is man-made; and woman's ethical code like her psychology is as yet undeveloped. In all these fields the editors and contributors hold constantly before themselves the "green peril" which is radicalism in sex theories.

One department of this journal, entitled "Notes of the Day" is devoted to current cases from the press, in which women have suffered, especially as revealed in courts, from the inhumanity of man and from the present double standards. Here scores of pathetic individual cases are briefly recited.

Another department is devoted to the review of novels, dramas, and other current literature, books, monographs, articles, etc., touching sex questions. Here the standard of criticism is very liberal as if from fear of prudery. In general, in these pages it is surprising to see how teeming fecund the German press now is in literature of this class.

When *Mutterschutz* divided, *Die Neue Generation* reviewed above became an organ for a society for the protection of motherhood; and the more scientific problems were relegated to another monthly journal of about the same size entitled *Sexuelle Probleme*, edited by Max Marcuse, M.D., which began in January, 1908, and is devoted to the science and practical policy of the *vita sexualis*. Here sex questions are discussed from a fundamentally male standpoint and by men, mainly physicians; and more stress is laid upon the hygiene of marriage, so that the reformatory motive is perhaps rather less prominent. In these two journals which have bifurcated from *Mutterschutz*, one becoming scientific and masculine, the other feminine, but both devoted to the same general topic, we have a most noteworthy instance of observed differences between the male and the female mind in method, matter, emphasis, etc. In the former journal we have full discussions of castration, hermaphroditism, homosexuality, and other abnormalities in their legal, social and psychological aspects, incest, relations between nearest blood relatives to inbreeding, exogamy, and the extreme limits of fertility in crossing. The nature of *libido* most now hold, may not only endure but thrive on abstinence, save in neurotic subjects. Prostitution, one writer holds, is on the whole beneficial to the community because it either kills or sterilizes the unmoral, the immoral, and those precociously or abnormally sexual, and thus prevents them from contributing to the perpetuity of the race. Retardation of the age of sex maturity is held to be in the interests of progress, for it is in the direction in which the race is tending. Nursing tends to postpone pregnancy and so increases the interval between births, and thus in this way as well as because mother's milk so greatly conduces to viability makes for better offspring. Other topics discussed are sexual dreams, Sadism, masochism, medico-legal cases involving sex relations, Jack-the-Ripper records, the psychology of

infanticide, what constitutes being high or low bred, the relation of sexual disorders to hysteria, consumption, and other diseases, the modes of mitigating syphilis and gonorrhea. All girls should be taught clearly and authoritatively the hygiene of the lunar month, just beforehand, briefly, and when the first experience comes, more fully, so that they may avoid the errors due to ignorance which are often so costly to health during the often rather long period of months and occasionally even years before the normal rhythm has been well established. No period of girlhood is so critical or so sensitive. Precept at first should always be personal and if possible maternal, for at no stage in the life history of woman is she so plastic or susceptible. Hence this topic should be given prominence in all mothers' classes. The eminent German jurist, von Liszt, proposes to legally penalize men who infect women with their own not yet cured diseases, provided such men have been instructed concerning the dangers, in the hope that though convictions be hard and few, a sense of responsibility in this respect now so feeble may be awakened. Judges are now not only enforcing more and more the existing laws, but in imposing penalties for their infractions are considering not only the direct physical damages but also the shame, humiliation and psychic pain caused to the victim, and this is strongly advocated with promising results by Professor Helwig, of Berlin, for all Prussia. Professor Ehrenfels thinks the West is in danger of being surpassed by the East, because in China and Japan practically all women of child-bearing age are bearing children, and even goes so far as to propose certain immunities and rewards for the very most vigorous, educated young men who have passed a medical examination.

Far, indeed, be it from the present writer to indorse all the above views, or the yet more radical ones which he forbears here to mention; but they are all well meant because their purpose is to reduce vice and disease and to increase the fecundity of the best and diminish that of the worst classes of population in the interests of national efficiency and the fatherland, of the army, of industry, and success in the colonies, etc. This movement, which is represented by yet other journals, societies, and publications too numerous to mention and which rests on a new scientific view of sex, which this is not the

place to discuss, it is hardly too much to designate as a great moral awakening. Germany may not be a greater sinner than other lands, but it far excels all others in careful statistical studies and various social surveys which have brought it more self-knowledge. Suffice it here to say that the specific movement there to have definite instruction in sex rests upon a tidal wave of new interest and insight which at present seems to bear some promise of rather radically reconstructing present ideas and even institutions involving the relations of sex. Based as the German agitation is upon solid biological, physiological, and sociological science, it is also ethical and national in the broadest and deepest sense. The consciousness and the conscience of the race have been touched. We cannot treat of the many components or even enumerate the agencies that are diffusing enlightenment among all classes. The most conservative and even the governmental authorities are tolerating and listening to various drastic schemes of reform, and reading plain-spoken literature with a growing sense that something radical must be done, and that new departures impend. Thus the more special problems of sex pedagogy in the school have behind them in Germany not only a large body of knowledge, but an intense new ethical momentum.

Meanwhile, in other lands a sense of the need and danger, if less accurately demonstrated for those who demand proof and shared by a far smaller proportion of the intelligent population, is nevertheless profoundly realized; and small though rapidly growing groups of physicians, social workers, etc., have organized many practical agencies that are far wiser and more effective than the type of purity societies of a quarter of a century ago, and which have devised a new kind of literature for the young, viz., the few-paged leaflet in place of the diffuse and unauthoritative dollar books for the young by inexperienced religionists and philanthropists. In France sex questions are now discussed, although somewhat incidentally, in the *l'Education Familiale*¹ now in its tenth year, and in the *Bulletin Trimestriel de la Société Protectrice de l'Enfance Anormale*. The French also have a *Congrès International*

¹ J. Renault: Comment préparer l'enfant au respect des questions sexuelles. *Education Familiale*, 1907, vol. 8, pp. 232-238 and 293-296.

contre la Pornographie. This has many branches: fourteen in Germany, one in England, two in Belgium, one in Denmark, forty-two in France, five in Holland, four in Switzerland, etc. Its purpose is to prevent the manufacture and sale or distribution of literature, art, etc., that is indecent or suggestive, and to bring justice to those who offend the laws in this respect.¹ In England, besides direct religious and moral agencies, eugenics represented by Galton's *Sociological Papers* and *The Eugenics Review* has proven to be a line of approach of great practical interest to the English aristocracy and to science. In this country societies to further sex purity and to teach the young have been formed in the last three or four years in New York, Philadelphia, Baltimore, Chicago, Milwaukee, Indiana, St. Louis, Denver, Portland, Spokane, California, West Virginia, Florida, some of them, be it observed State societies. Others are being organized as I write (April, 1910) in Georgia, Connecticut, Texas and New Jersey. These societies are generally composed of doctors and laymen and they seek to arouse the public to a sense of the present dangers by pamphlets and discussions. (The Chicago society under C. R. Henderson has issued nearly half a million pamphlets. See, too, the national year book for 1908 of the American Society for Scientific Study of Education devoted to this subject.) The New York Society has associated itself with the teachers of biology with a request to the authorities to provide sex instruction for all first-year high-school pupils. The Spokane society (which has also distributed nearly half a million circulars) addresses one about their birth to children from 6 to 10; another to boys from 10 to 13; another for those about 13 or 14; one for girls of 14, etc. The Maryland society employs two paid agents: a man giving half his time and a woman giving all hers. "The children from 10 to 12 years or thereabout are taken in small groups and given very objective instruction. They have in their room flowers, cocoons, frogs, birds, mice, rabbits, etc., so that every step in each talk has definite tangible bearing in their minds." Various similar attempts are being made at various points with children in the

¹ Eugene Prevost: *Le Congrès International contre la Pornographie*. *L'Enfant*, 1908, vol. 18, pp. 258-261. See also the bulletins of the *Soc. Française de Prophylaxie Sanitaire et Morale*, since 1900.

two upper grammar and in the high-school grades. From these and many other centers active campaigns of education are being waged against vice. The new movement here is at present perhaps rather too much dominated by the medical standpoint and is perhaps disproportionately conscious of the dangers of disease. We must, therefore, first strive to evaluate this factor for pedagogy.

The Use of the Disease Factor in Sex Pedagogy.—To estimate this aright we must glance backward. In classical antiquity, especially in Greece, there was a frankness and openness concerning sex life which our day has lost. How far the free Arcadian conditions, originating perhaps with primitive people and not only unrestrained, but aggravated by the ancient civilizations as their wealth and luxury increased, became a factor in undermining the empires of old, we do not know. We do know, however, that prudery, self-consciousness and secretiveness in these matters have increased in recent centuries. Sexual diseases have a cultural which is no whit less significant than their medical history. Syphilis, which has had much, perhaps more than we know, to do with the great pestilences, seems to have appeared in Europe in the fifteenth century, and Ivan Bloch¹ thinks its story will be complete in five acts. Some thought it due to sodomy. Its first recorded outbreak is during the Italian campaign of Charles the VIII, of France, in 1494. His army of 32,000 contained soldiers from many nations and spent four weeks at Rome where, we are told, there were 14,000 Spanish prostitutes. Wherever this army went the disease spread like an explosion with great virulence. All historians say it was unknown. Although some pestilences had been more fatal, "not even the black death made such a fearful impression or left such terror in the souls of posterity." Its malignity can only be explained by assuming that Europe had been free from it before. All the old chroniclers insist that previous medical reports from Hippocrates to Galen knew nothing of it, so there were no remedies and the deaths were countless. It affected all classes, even the clergy, and society was appalled

¹ Der Ursprung der Syphilis. Fischer, Jena, 1901, vol. 1, 313 p. Also Das erste Auftreten der Syphilis in der europäischen Kulturwelt. Fischer, Jena, 1904, 35 p.

to see the social vice suddenly stand out in such a glaring light. Many believe it was imported from Hayti or Hispaniola by the sailors of Columbus. At any rate, Indians there, where it was less fatal, had elaborate modes of treating it, by hydrotherapeutic devices and sweat houses. This very skill would indicate that the disease was old among them. In ancient Mexico there were experts with hospitals, public and private, specially devoted to this disease. By the year 1500 nearly all European lands had suffered and in the early part of the next century the disease spread to Asia, China, and Japan, although Africa until lately has shown only the slightest signs of infection. The virus always works most rapidly on virgin soil where there is almost no immunity. The moral condition of the period just preceding in Europe was by general consent very low and profligacy was open. This disease was given not less than 536 different names in European lands, until in 1520 an Italian doctor named it from the mythic shepherd Syphilis. This was the first fatal gift from the New to the Old World and is in a way connected with the Renaissance and the Reformation. It impressed the world somewhat as leprosy did the Middle Ages. Krafft-Ebing believes that there are deep inner connections yet to be known between this disease and the type of civilization that has since followed. Its influence certainly has profoundly affected the relation of the sexes and greatly modified love and given it a very distinct type from that which it had in ancient Arcadian days and in the Middle Ages. Schopenhauer says that the modern period as compared with this is stern, gloomy, and sinister; while the antique world was as happy, careless and free as childhood. The two principles that separate them, he thinks, are the knightly one of honor and venereal disease, a noble pair of brothers! The latter had its moral as well as physical effects. Since then love's arrows have been poisoned and elements of hostility have been insinuated into the relations between the sexes, and the diabolical element involving distrust has affected the very best of society. Had this disease existed, there surely never could have been such extreme immorality in ancient days, for there were no sex ghosts that haunted the world then. This disease contributed most to bring the great horror of women devoted to pleasure, as mediators of disease that bears

the mark of Cain. This destroyed the mediæval *Frauenhäuser*. It compelled caution in public baths, brought fears and perhaps phobias of contact, encouraged certain types of separation of the sexes with some distrust, magnified individuality and perhaps favored spiritual and physical freedom because they were associated with isolation. Indeed, the development of individuality in the Renaissance, as opposed to the mediæval communal spirit, may have owed something to the horror which this disease excited. Some have connected the decline of culture at the end of the sixteenth century with the advent of this disease, which brought some subtle psychic alteration into the consciousness of Europe, which is possible when we consider its greater severity and its connection with tabes and progressive paralysis. It has something to do, too, with individual degeneration because its hereditary forms gnaw more fatally at the vitals of society than its acquired types, and its results are seen in still-births, divorces, infections from nurses, sterility, etc. Its infections are all the more dangerous because they are often innocent. The last act in the drama is the weakening of the virus and the gradually progressive immunity, which is slowly advancing. Occasionally, already children of syphilitic mothers are immune. Perhaps the strong mercurialization of the previous generations has something to do with it, for quicksilver acts on it like water on fire. But for extra-marital relations, syphilis would vanish in a few generations. There is great danger and increase in colonies, especially negroid and Mongolian females impart a most malign form of the disease, so that cross racial types greatly intensify it, as is seen in Anglo-Saxons in the East. Possibly by the end of five centuries from its origin, its European existence may approach an end. Virchow, at any rate, has assured us that this disease and men are not inseparable. It is infectious only and has no known spontaneous origin.

When Fournier's "Syphilis and Marriage" was translated in 1880 and became a classic, almost nothing was known of gonorrhea, the germ of which was discovered by Neisser in 1879 and has played a rôle of great and interesting importance. Syphilis strikes chiefly at the child, but the gonococcus at the reproductive function of woman, besides having grave collateral effects of many kinds. The wreckage of these chief

venereal diseases is caused mostly not by debauchees, but by men who pass as respectable. The latter disease is far more universal and venereal morbidity is higher in cities than in the country but gonorrhea is a greater depopulator. A recent German expert holds it responsible for more than 45 per cent of the sterile marriages, directly causing metritis and bringing social misery in its train. Voluntary childlessness is bad enough; but barrenness that is enforced against the dearest wish of a woman's heart by "a shame that cannot be named for shame" is far worse.

The Cultus Minister requested all regular Prussian physicians to tell him how many persons had consulted them for their own sexual diseases on a certain day, choosing April 30, 1900. The answers show that on that day 41,000 patients had sought relief, although as the report was voluntary, only about two thirds of the physicians reported, so that at this rate, had they all done so, the number would have been some 60,000. Even this number is, of course, too small, since quacks, curists and druggists whom so many consult were not asked to report, and many of those afflicted refrain from consultation. It is, of course, impossible from such data to assume what proportion of the community was afflicted, even if this was an average day, but it, of course, indicates that the number is very large. Another notable fact brought out by the report was that the proportion of victims of these diseases was much greater in large than in small cities, Berlin alone furnishing a little over one fourth of all, the percentage of the population seeking medical aid increasing somewhat in proportion to the size of the town. A later very careful census of Mannheim with a population of 150,000 showed 4,200 diseased men, the great majority of whom were fresh cases.

According to Birdseye,¹ conditions are very bad in American colleges. After gathering in his first data, he was so appalled at the results that he feared he should be thought to be an alarmist and his conclusions challenged, they were so opposite to the testimony of college authorities, so he printed

¹ See the data which C. F. Birdseye has collected from thirty American colleges concerning the prevalence of sexual vice and disease and drunkenness. In *The Reorganization of our Colleges*. Baker & Taylor, N. Y., 1909, 410 p. See pp. 118-145.

thirty booklets and distributed them widely, sought confirmatory evidence in addition to his own conversations and correspondence with "hundreds of college professors and officials, students, deans, medical men, and recent graduates." He assures us that he does not use the worst reports of the evil "which is at the very bottom of our college waste heaps"; and finds that parents, alumni, preparatory school-teachers, and college authorities are sunk in a "fatal torpor in regard to these things." "In many of our larger colleges and universities, and in too many of our smaller ones, a very considerable part of the college home life is morally rotten—terribly so. Some of the smaller and older colleges, with grand records in the past, have as low a standard in student morals as the larger universities. Some of the worst conditions prevail in minor denominational institutions which are presumed to be ultra-religious and to be the chief places for furnishing clergymen for such denominations." "In some institutions from twenty per cent to forty per cent of the graduate and undergraduate students consort with lewd women, and at least as large a ratio drink to excess at times. The proportions are much higher in the upper classes than in the lower, showing that these vices are largely the direct result of influences which prevail in the college community life and the college home. In some instances at least twenty per cent of the students have been venereally diseased before their course is finished." "These appalling figures are based on the carefully sifted estimates of the students themselves in many widely separated institutions, checked off by men whose professional or other college connections have brought them into close personal touch with the college home life. The testimony of a member of the faculty as such may be, and sometimes has been found to be, practically worthless in regard to these matters, for they are entirely outside of his pedagogy and therefore outside of his department." "Except in large cities these evils are much more likely to be perpetrated in a neighboring factory center than in the college town." "Another terrible aspect of the social evil in college is that the women are frequently of a low class, who also consort freely with mill hands, miners and rounders of the worst type, and are almost of necessity diseased." "Our college students are not financially able to

indulge in expensive luxuries of this kind." Our college authorities have "failed to properly study or combat these evils, but they have too often emphatically and unceasingly denied their existence, when a little examination would have shown them that they were wrong. One professor in a college situated in a community which morally is notoriously one of the worst in the country, was quite indignant at my suggestion that in his institution any considerable proportion of the undergraduates were diseased. But after a frank discussion of facts and local conditions, he admitted that the average might be as high as thirty per cent. Again and again this fatal blindness, and even unwillingness to see, of our college authorities is encountered by those who investigate the college home life." "The percentage is much larger in the graduate schools than in the academic courses; . . . and it is not too much to assume that in some cases at least twenty-five per cent of those who complete the professional school courses have at some time been diseased." Lately the press condemned a Catholic priest for warning the young women in his parish not to associate with college students. "Those who are acquainted with the student conditions in that institution know that these priests would be justified in almost any measures which they might take to protect their young women parishioners. A reputable physician has recently stated that of his own knowledge all the undergraduate members of a certain fraternity chapter (his own) were diseased, with the exception of three freshmen who had just been initiated, and that almost all the recent graduates had suffered in the same manner." "In the college homes of some institutions separate towels and other supplies are kept for those who are actively diseased; just as in many such homes there are special rooms and accommodations, 'boozatoriums,' for those who are brought home drunk. In too many college homes there is a fearful obscenity and filthiness of language." "College and fraternity banquets frequently end in drunken orgies." "The colleges are too often blind leaders of the blind with low ideals." But I forbear, hoping that despite his careful and conscientious precautions of method, Mr. Birdseye may have been misled into magnifying the evil. No one familiar with academic life can deny that there is at the very least now a

prima facie case for further investigation; and if these evils exist, moral reorganizations as drastic as the financial ones this author proposes are necessary. I firmly believe that this author exaggerates a real evil.

Dr. P. A. Morrow¹ avers that "there is no class of disease in any department of medicine which in the past has been so neglected and mismanaged. Many physicians still look upon gonorrhea as a trivial affliction and their entire armamentarium consists of a glass syringe and half a dozen or more formulæ for injection. To them syphilis is simply a sequence of primaries, secondaries, and tertiaries and the whole therapeutic problem resolves itself into so many months of mercury followed by so many months of iodide of potassium." This mere modicum of often mistaken knowledge is to be traced to the low standards set by our medical schools and to the subordinate position always occupied by venerology. Fifteen years ago the catalogues of seventy-five leading medical institutions showed that in half of them there was no special provision made for such instruction, and in all these studies were elective and not essential. Since then things have improved, but there is great absence of proper clinical facilities. "The diagnosis of syphilis furnishes a ready refuge for ignorance so that patients are carelessly and often wrongly condemned to a long course of specific treatment, and many physicians lightly sanction marriage." "Taking only lesions which may involve or compromise the integrity of important organs, we may place to the debit side of syphilis 90 per cent of all cases of locomotor ataxia; more than 75 per cent of all ocular paralysis; a considerable percentage of cases of iritis, choroiditis, retinitis; a large but undetermined proportion of general paralysis, paraplegia and hemiplegia; 80 per cent of all cases of paresis have a history of syphilis; every hemiplegia occurring in men under forty years of age not addicted to alcohol is of syphilitic origin. This does not include its morbid determinations to the heart, kidney, and other organs." "The bill of its hereditary morbidity and mortality is much larger. Syphilis causes 42 per cent of all abortions; 60 to 80 per cent of syphilitic children die *in utero* or shortly after birth; those who survive are the subjects of dystrophies and degenerative changes, physical and mental, which make of them inferior beings unfit for the combat of life."

"The pathological liabilities of gonococcus infection are scarcely less formidable. The undeniable and scientifically demonstrated danger of this infection in women is that it causes 80 per cent of all deaths from inflammatory diseases peculiar to women, practically all the pus tubes, more than 75 per cent of the suppurative pelvic inflammations, and 50 per cent of all gynecological operations."

¹ Education within the Medical Profession. Medical News, 1905, vol. 86, pp. 2153-2156.

"From 26 to 30 per cent of gonorrheally infected women abort, and from 45 to 50 per cent are rendered irrevocably sterile." About 80 per cent of the blindness of the newborn and 20 per cent of it from all causes is due to this infection, and yet these things do not form an integral or essential part of medical education. The public is still responsible for its ridiculous prudery and for the traditional prejudice that surrounds all these matters with an atmosphere of shame. How can the teaching of young men to lead lives according to nature and health be profane? Even the profession itself is tainted with this atavism. Even sanitary officials entirely ignore the existence of these diseases. When syphilis arose in Europe in the fifteenth century, it was given a baptism of shame, the stigma of which still clings, and this "in the face of the fact that there is in the aggregate more venereal infection to-day among virtuous wives than among professional prostitutes." To the former, no odium usually ought to be attached, but we should feel for them only pity. The medical profession should rise above this insensate prejudice. While these diseases are always a misfortune, they are not always a merited punishment. Reform should commence in the ranks of the medical profession and especially in the professional education. It is, however, consoling to be assured that what Dr. L. D. Bulkley called "the great black plague" does seem to be checked in some quarters, for according to statistics collected by Schwiening¹ it appears that from 1870 to 1880 the chief venereal diseases in the European armies have shown marked decline in France, Germany, England, Belgium and Holland, and a slight, though less, decline in Austria and Italy, and perhaps none in Russia, although statistics there have been kept only since 1885.

R. C. Henderson gives the following statistics: "In the Prussian-German army during the years 1873-93 the average annual sickness from these causes was 32.2 per cent of the active soldiery; in the French army of 1883-93, 43.6 to 58.9 per cent; in the army of Austria-Hungary in the period 1869-93, 53 to 81.4 per cent; in the Italian 1883-93, 79 to 104 per cent. In the German navy there were sick in the years 1875-76 to 1888-89 on the average 127.9 per cent. In the English army it was worse, and in the Dutch army the ratio rising to 224.5 and 294.1 per cent. If we take all the European armies together we may say that each day 70,000 to 80,000 soldiers are treated for venereal diseases and more or less unfitted for duty. . . . In the civil population it is bad enough. Only a part of those affected enter hospitals, yet the figures for these are startling enough. In Prussian hospitals in 1887-99 about 240,000 persons or 58 per cent of all patients were treated for venereal disorders. In more northern lands, because greater care is taken, the larger ratio obtains. . . ."

¹ Beiträge zur Kenntnis der Verbreitung der venerischen Krankheiten in den europäischen Heeren, sowie in der militärpflichtigen Jugend Deutschlands. Hirschwald, Berlin, 1907, 99 p.

The Committee of Fifteen report that in New York "a considerable proportion of the syphilitics treated in the hospitals are boys in their teens. Probably the majority of sufferers from syphilis are infected before their twenty-sixth year. Of 10,000 syphilitics who came under the observation of Professor Fournier, 817 were infected before their twentieth year, 1,530 between twenty-one and twenty-six." "Of 3,122 children brought before the Juvenile Court in 1908, one per cent of the boys and 20 per cent of the girls were suffering from venereal infection," writes Clara Schmidt.

Morrow estimates that one eighth of all human disease and suffering comes from this source. These diseases fall most heavily upon the young. Every year in this country 770,000 males reach the age of early maturity or approach the danger zone of sex. Judging the future from the past some 60 per cent or over 450,000 of these men will sometime during their lives become infected: 20 per cent of them before the twenty-first year, 50 per cent before the twenty-fifth, and 80 per cent before the thirtieth year. These 450,000 infections, be it understood, represent the venereal morbidity incident to the male product of a single year, each succeeding year furnishing its quota of victims. So of women, about 80 per cent of the deaths from inflammatory diseases peculiar to their sex, 75 per cent of special surgical operations, and 60 per cent of all the work done by specialists in diseases of women are the result of specific infection. At least 50 per cent of these infected women are rendered absolutely sterile. Every year thousands of poor young wives are thus infected and their aspirations to be parents are swept away. Dr. Louis T. Wilson¹ thinks this is on the increase in this country rather than on the decrease. Is it not time, therefore, as Professor Henderson says, "for all those who value our national health and morality to unite in a reasonable, earnest and patient campaign for sexual purity? For apathy and neglect there is no longer excuse."

Dr. W. T. Murrell² states that with emancipation, the stalwart negro race became a victim of the sex impulse and there was a carnival of indulgence and a maximum increase of births between 1860-80; but many of the children born then were degenerates as compared to their forebears, and their progeny are very rapidly declining. This writer affirms the general early defloration of girls in startling terms, based upon a collection of medical opinions. Worst of all is the increase of disease. "It is my honest belief that another fifty years will find an unsyphilitic negro a freak." The negro is never afraid of this or other diseases because he assumes that the doctors have a cure for every trouble. Sexual errors are never regarded as serious. It is largely this disease, connected as it is

¹ A Few Remarks on the Prevalence of Venereal Disease. *Amer. Jour. of Public Hygiene*, Feb., 1908, vol. 18, No. 1, pp. 39-45.

² Syphilis and the American Negro. *Jour. of the Amer. Med. Assoc.*, March 12, 1910; vol. 54, No. 11, pp. 846-849.

with the abandonment to passion, that has made the negro to-day a far inferior type to the one of two generations ago. "His mind and body are traveling different ways." He is no longer a fixed type, and in fifty years is likely to change even more than he has in the last.

We can now squarely put the first question in this field. It is inevitable and parents and teachers with a just sense of their responsibility must now answer it in one way or another. It is this: If the above is true, shall your children be clearly informed of it, or will you let them take their chance in ignorance, for the results of which they may later hold you to grim account? With one tenth the danger of any other infection—diphtheria, scarlatina, etc.—you would do all in your power to lessen the chances of contagion; so why be silent here? But, on the other hand, we must not forget that there is some justification for the instinctive reticence of elders. Nothing seems more opposed to the very nature of childhood or better calculated to dry up the springs of love in the soul at their very source. These grim facts, it would seem, must drive juveniles out of their paradise, if not tend to make them old and pessimistic before their time and suspicious of all their friends of the other sex. Does the peril justify thus blighting the joys of young life? Will not such inculcations add to the repressions which psychopathology shows us are already far too great in this field for some, and cause most of the neuroses and many of the psychoses of later life? Any physician can see the physical dangers, but only those with moral and psychological insight can do justice to these subtle dangers. This is an objection which must be weighed with care and, of course, must be determined on with reference to each individual case. Young, nervous and delicate girls sheltered in good homes have very different needs here from hardier ones early thrown out upon the rude world alone; and neither must be the norm for the other. Physicians who think their chief duty complete when they have imparted the facts and figures of sex pathology are no more fit to cope with the situation than parents who live in the fool's paradise of fancying their own children are in no danger or have yielded to the natural reluctance to impart this repelling information to their pubescent boys and girls. All data like the above and more

should be in the doctor's pharmacopoeia, but handing it out to all alike would work great harm. Some need to know yet more, and a few lives would be happier and richer in innocent ignorance, were this possible. Most children, however, I am convinced need to know the general facts about these diseases as about others that they may catch. Those with perverse inclinations need them brought out luridly enough to provoke sufficient fear to organize the maximum of deterrence possible in their souls. The case must be "put up to" certain young boys strong and hard, in the most concise and cogent language that the gang vocabulary can supply. Fear has had a great deal to do in the evolution of man, and it is our bounden duty to utilize it here for all it is worth. As adults grow to maturity they generally lose the power to adapt to any wide diversity of personalities, or even to recognize them, and perhaps no one who could do the best thing for a tough boy here could also do the best by a delicate one, or *vice versa*, to say nothing of girls. He would tend to gravitate toward an average mass method that would injure both. Our returns show that the very street gamin knows in his coarse way the chief facts about these two diseases; and those who have become precociously immoral are often led by their knowledge to get possession of and actually use preventives "so as not to get stung." Even this may be a handicap on promiscuity. Teleological writers, however, justify these diseases as specters designed to frighten young people into chastity until adolescence is complete. More regard them as efficient agents in eliminating the unfit; and if they could be safeguarded, would let them kill the infected individuals and families. A few regard them as intensive stimuli of individuation in those whose genesic power has become poisoned. In sexual selection, too, we are told, love favors come with dangers, and in man's artificial environment these new dangers of disease supply the place of that which once jealous rivals provided. Others think the worst result of these diseases is that they deter the best and most prudent from the hazards of matrimony. But all these are merely guesses. One thing only is certain, viz., that not only every normal boy, but also every girl in the early teens craves and needs to know the facts, each to be sure in his own way: for boys, bare and bold and with

every detail, while girls want the same facts, but more veiled, indirect, taught with a little more sentiment and with adjustment to temperament. Both are stronger and better for this knowledge and more able to face life with courage and resolution. This mental preparation should come just in time to curb the first uprush of passion, to which our forebears applied hell fire, of which these diseases are our modern version and surrogate with the great pedagogic gain that now the devil forecloses his claim far more promptly, and there is no Redeemer to rob him of his just prey. The very concept of Jesus bearing all our diseases and infirmities in this sense is repulsive.

The ancient oath of Hippocrates which physicians had to take was: "My tongue shall be silent as to the secrets which are confided to me, and I will not use my profession to corrupt manners or aid crimes." To-day the medical and often penal codes enforce professional secrecy and perhaps exempt the doctors from disclosing, even in criminal trials, information acquired in the exercise of their profession. These diseases put up to the doctor a new and serious problem, for all hygienic laws require physicians to report diseases that are dangerous to the public health. Venereal diseases are so, but are usually exempted from declaration save in Norway and Denmark. Sanitary bureaus certainly ought to register these diseases. The French law punishes a physician who allows the nurse of a syphilitic child to suffer. If the father of a girl about to marry asks his own physician whether the prospective bridegroom, also his patient, is fit to marry, what should the physician do? Under present conditions he would certainly be put on his mettle. He might refuse to answer, or advise against the marriage, giving no reason, or appeal to the young man's honor to confess. Occasionally, scoundrels rely on the doctor's present custom and code or reticence. Should the doctor stop short with simply advice against a marriage which he knows will result in infection? Some doctors urge such young men to insure their lives, knowing that they will not be willing to face an examination. In Spain, a physician's certificate must accompany every demand for a marriage license.¹

¹ Why should a woman's friends warn her against marrying a drunkard and not against one infected with this disease? Dr. Grandin says that the nubile girl of the future will demand a certificate of health; that women physicians will be at-

In France, Fortin demands a law authorizing the physician to "no longer respect the professional secret when it comes to a project of marriage." Here, however, we are trenching upon eugenics.

Place of Eugenics in Pedagogy.—Luther Burbank, by his magic evolution of valuable out of worthless wild plant stocks; Nietzsche, by his effort to apply Darwinism to man by condemning pity, and even Christianity, because it helps the weak and sickly to survive when they ought to perish in the interests of posterity, and by insisting that a higher superman can and must be evolved; Galton, with his contagious idealism and also his many practical devices for suppressing the bad and increasing the best family stirps—all these and many more have now called the attention of the world to the subject of human heredity in a new practical way, and revived the old dreams of a Utopian and Platonic or a kind of future biological millennium. As opposed to this, modern philanthropy not only keeps alive, but tenderly nurses the weeds in the human garden. After years of diligent crossing, when at length a very few specimens of fruit stand on a tree far superior to all others that have been achieved, Mr. Burbank kindles a great fire, consuming thousands of specimens that were incapable of producing higher types. We cannot pull up or burn the human weeds, and hence it is very doubtful, despite our marvelous progress in arts, sciences, wealth, and comfort, whether mankind in all civilized lands is not actually declining in quality as biological specimens, as we know it is beginning to do in rate of increase and in many places actually in numbers. The Malthusian specter of the globe in the future, crowded far beyond the means of sustenance, seems thus effectively laid; and if it were ever realized, it would only be by the spawn of degenerate families like the Jukes, Ishmaels,

tached to every factory and store where girls are employed; and he insists that professional secrets should no longer aid in the spread of vice.

Dr. E. L. Keyes combats the widespread notion that gonorrhea is no worse than a cold and that a mild gleet is not contagious, and above all the abominable view widely shared that intercourse or marriage is a wholesome treatment for its milder forms. His appeal for prophylaxis (*The Need of Sexual Education*. Med. News, 1905, vol. 86, pp. 1165-1167) is based on statistics, which he thinks show one in ten in New York and in Berlin one in four unmarried females are syphilitic, and holds that the first step is usually drink.

Karnagels, and other low-grade stocks. A few generations ago, a large family was very desirable, especially in the country, and it meant increased income. Even a widow with a large family was a good marriageable proposition. Under present economic conditions, however, large families often seem unwise, and the strong, natural, wholesome desire for offspring essential for the prosperity of any race or nation is brought into direct opposition to the passion for advancement in social condition. On the other hand, F. Galton says: "Few things are more needed by us in England than a revision of our religion to adapt it to the intelligence and need of the present time."¹ He meets the criticism that human nature will not tolerate any interference with freedom in marriage by saying that monogamy has been established as against promiscuity and polygamy, both by law and by social sentiment. So has endogamy, as if even primitive races felt human traits more valuable than money or land. So prohibited degrees, and even celibacy have changed pretty settled ideas and customs of sex. Indeed, religion has always been the most potent of all factors in matters pertaining to the transmission of life and demands now honest morals in unambiguous language. Marriage has always been a very elastic institution. H. G. Wells has contributed to popularize these ideas in England, and an anonymous writer has proposed a voluntary nobility,² which shall lead the simple higher life, to which all are invited who have good intent, who imagine their own best and strive to attain it, who love the slogan of justice, sincerity, truth, control, friendship, honor, no matter what their creed, provided only they are not militarists. It is assumed that after young men have had a taste of wine, love and song, and have "felt the full bite of able-bodied desire," and at the age of twenty-three or twenty-five, when the ebullitions of the earliest youth are controlled, they may like to enlist in this knighthood; that the elements of a Utopia, which are hidden, dispersed and disorganized in the world, unsuspected even by those who cherish them, might thus be brought together. In this Samurai college there must be no idleness, but no drudgery.

¹ *Restrictions in Marriage*. Sociological Papers, 1905, vol. 2, pp. 1-13.

² *Proposal for a Voluntary Nobility*. Samurai Press, 1907, 31 p.

There must be seven days every week spent from sunrise to sunset in the open air alone, fasting and in silence. In a sense, everything here is a discipline for ideal parenthood. We need not jest or take too seriously the proposition of H. G. Wells¹ for a state gratuity to each wife bearing a child, to be increased if the child proves superior. This would make motherhood a paying profession, and the career of one who had a number of healthy children would be prosperous financially, so that she would be a great advantage to her husband. "Prolific marriage would be made a profitable privilege." This Utopia should issue certificates of fitness for matrimony to such persons of both sexes as wished it on the basis of examination; and there should be measures taken against deceptions on either hand. While none need enter, such a scheme would attract the best and not the worst. This is not inconsistent with A. Lang and J. J. Atkinson,² who think that the control of mating was the origin of the state, the chief function of which should still be to protect the interests of posterity. The tribe and other ethnic associations have usually been marriage groups which tended to widen, and in an ultimate system there will perhaps have to be a place for about every marriage type that has worked well anywhere from henid theories up to the Catholic and Comptean view of the indissolubility of this tie. Of course such a eugenic synthesis is far away and its only use at present can be to soften the rigidity and startle the unintelligence in this field.

M. Gruber³ declares that there is no doubt that if we practiced natural selection, bringing to bear upon it all the knowledge that we have, as breeders of cattle do, within a few generations a race of men would be developed that would far exceed in beauty, physical power, and ability, any the world has yet seen. We might also, he thinks, produce a race of monsters by violating all these precepts. He admits, however, that men will never, in these modern days of freedom, submit to such restraints as that to which domestic animals are subjected in the way of procreation. Moreover, there are no experts that could guide in all the details of practical solutions. To pro-

¹ A Modern Utopia. Scribner, N. Y., 1907, 393 p.

² Social Origins: with Primal Law. Longmans, N. Y., 1903, 312 p.

³ Hygiene des Geschlechtslebens. Moritz, Stuttgart, 1907, 93 p.

create children thoughtlessly is, however, a grave violation of duty, and to do so knowing that they will be defective is about the worst sin man can commit. We can, however, apply the constraints of law to prevent the multiplication of defectives. To make the best do their best we must rely upon individual, race and social hygiene. Public opinion must be developed to the point where we should realize that for the fit not to rear children is a sin against the community and the future and that to do so is the first end and purpose of marriage. Indeed, he would have the entire sex element of our nature regulated solely with this end in view and would increase the legislation which limits, if not exterminates, the unfit. It is generally agreed that the simplest and most effective prophylaxis against consumption is the abstinence from wedlock of all who are in any degree affected. He believes that about all the fundamental principles of biology have application to sociology. J. Rutgers¹ insists at great length and with some learning that "only children wished for by both parents must be born," and insists that the proper use of preventives is "the physiological *optimum*, a godsend to long-suffering and heavy-laden mothers and may be the salvation of the race." Dr. Mott would have the state encourage registry offices authorized to issue bills of health that would have not only moral but commercial value to the possessors and their children, would be of use in life insurance, in obtaining employment, and in obtaining pensions. Savages require certain achievements or ordeals of suffering for candidates for marriage. Why should not the hemigamy of the future be upheld by a force equal to the old sexual taboos with their religious sanction? Some would have concealment of grave hereditary diseases a crime so serious as to annul a marriage contract, despite the belief of some that a very slight taint may benefit rather than injure a good stock. Nordau thinks our vaunted thoroughbred animals, e. g., the horse, are adapted for only one purpose at the expense of their general vitality and that it would be hard for stirpiculture to select the really best qualities to breed for in the human race. He cites in support of this, many men of great and special talents but of ugliness and in-

¹ *Rassenverbesserung*. Minden, Dresden, 1908, 303 p.

feriority otherwise. Posada thinks a great general good would be attained when women would refuse an impure man with the same repugnance that he would feel toward an impure woman. Perhaps we need patriarchal families. Weismann before committing himself to eugenics wishes further information as to whether tuberculosis can be banished from a family. Tönnies and C. A. Witchell ¹ are uncertain about purposive breeding because it is not certain what should be aimed at. Should a good man choose for the mother of his children the greatest physical attractions, or a spiritual elevation that makes him forget them? Selection works by some principle too subtle for science as yet, for slight inclination, many agree, can be generally influenced by hygienic considerations; and it is at this reserved stage rather than when love has supervened that appeal can be effective. Probably if all the lower half of the race were to marry, their progeny would be superior to themselves rather than inferior; and if the best mated, their progeny would, on the whole, be inferior rather than superior. Eugenics, with its honor certificates, may perhaps be regarded as the culmination of all that we call evolution, because philanthropy is thus extended to future generations. Sentimental charity would be eliminated and a new religion inaugurated. J. F. Bobbitt ² points out how the many aristocracies of our day are constantly training some for one, some for another, kind of high ability.

The number of children born of native American parents is now less than in any country of the world. In New England where the situation seems worst the death rate of whites numbers much more than the birth rate, while in the same region the birth rate of those of foreign parentage is forty-five per thousand greater than the death rate. The advent of five million women in the industrial wage-earning field is one factor, while René Bache ³ estimates that voluntary sterility costs us half a million babies in ten years. Among the better classes child rearing is very expensive; the fee of doctors, who to justify their charges often exaggerate the dangers of child-

¹ *The Cultivation of Man According to the Teachings of Common Sense*. London, 1904, 168 p.

² *Practical Eugenics*. Ped. Sem., Sept., 1909, vol. 16, pp. 385-394.

³ *America's Race Suicide*. *Pearson's Magazine*, 1906, vol. 15, pp. 410-416.

birth until women are afraid, is from one hundred dollars to one thousand dollars. According to Bertillon's law the birth rate is inversely as economic prosperity and he finds that among the poor it is three times what it is among the rich. Again, free religious agnostics are said to have the fewest children, then come Protestants who are exceeded by Catholics, while the Hebrews outrank all. A German woman, drunkard and thief, had 834 descendants, most of whom were worthless and in seventy-five years cost the German government \$1,250,000. There are now about two and one half million more bachelors of twenty and beyond than unmarried young women in this country. Newsholme and Stevenson,¹ Taylor,² Yule,³ show that the fall of the birth rate of the upper class of London is just about twice that in the lower class, that it was greatest from 1891 to 1901 and there was no relation between this and the cost of living, that the decline extends to illegitimate births and is everywhere due to artificial prevention which threatens the welfare of nations. W. A. Chapple,⁴ too, thinks that natural fertility is undiminished, that women dread maternity and crave ease, for a large family makes a woman a slave. The laws that forbid children from eight to fourteen to work prevent them from compensating the expense for rearing them. But for artificial prevention marriage rates would decline still more. A barren life and a loveless old age is a fit punishment for olegantropy. Our view is just the reverse of Stuart Mill who thought large families should be looked upon as is drunkenness.

Many ancient and primitive people expose the child, especially the weak and defenseless, to eliminate the unfit. Just so now, H. M. Boies would limit the fecundity of degenerates and McKim would kill the worst criminals painlessly and tenderly. Weinhold would castrate annually the unfit men

¹ A. Newsholme and T. H. C. Stevenson: *The Decline of Human Fertility in the United Kingdom*, etc. *Jour. of Royal Statis. Soc.*, London, 1906, vol. 69, pp. 34-87.

² J. W. Taylor, *The Diminishing Birth Rate*—Presidential Address before British Gynecological Society, Feb. 11, 1904. Ballière, London, 1904. •

³ G. W. Yule, *On the Changes in the Marriage and Birth Rates in England and Wales During the past Half Century*. *Jour. of Royal Statis. Soc.*, 1906, vol. 69, pp. 88-147.

⁴ *The Fertility of the Unfit*. Whitcombe, London, 1903, p. 127. •

and sterilize unfit women by *tubo-ligature* which is relatively safe and painless. High grade imbecile girls just able to earn their livelihood are most fecund of all sources of degenerates, and criminal women should be allowed to choose between the alternatives of surgery sterility or life imprisonment, and the wife of a bad or diseased man at the end of his sentence should be offered an operation or a divorce at her option. Induced sterility should rank with induced abortion as a crime except where defined. Voluntary restraint within the marriage relation is impractical. Whether a great increase of mankind within the next generation is desirable is very doubtful.

The fatalism of heredity is a favorite theme for novelists. Zola showed how blood relations bring prolific but worthless progeny in his romance of *Adelaid Fouqué*, who married a Rougon, and later Macquart. Freytag's "*Ahnen*" traces a family through several centuries to show how constant their strong, good traits, in varied, diverse social strata were of little influence on heredity. Also T. Manns *Buddenbrook's* description of a family of a great vigor and eminence slowly broken down financially, socially and morally by two inter-marriages with a decadent, morbid stock, is illustrative. Gordon's "*Sebald*" has many admirable representations of heredity. Alfred Book's "*Der Kuppelhof*" describes a son who inherited vagabondage of his father in the fine form of an exorbitant fancy which caused him to break off an engagement at the last moment by an outbreak of strange peculiarities.

W. Schallmayer¹ thinks that the classes who succeed in life tend to sterility. Of 150 professors 88 were fifty years or over and these had 3.8 children each. Theologians come from larger families and still have more children, but the number declines with each generation. The families from which the younger professors come are smaller than those from which the older ones come. The wives of the latter come from large families and a small death rate for the children. Artists spring from families averaging over six children while they themselves had only 2.4 each. The same law was found to hold for men in service of the state, for merchants, manufacturers

¹ Die soziologische Bedeutung des Nachwuchses der Begabteren und die psychische Vererbung. *Archiv f. Rassen- u. Gesellschafts-Biol.*, 1905, vol. 2, pp. 36-75.

and most brain workers. Blaschko, Steinmetz, Odin and Candolle found talent was rarely inherited. Odin found that of 286 eminent judges two thirds had not a single relative of mark.

B. Révész¹ has collected data from many lands to show that other things being equal, younger children are taller than older children. "The younger the mother the smaller are the children." He even goes so far as to attribute the small stature of the Japanese to the fact that girls marry so young, while among the tall Scots, Swedes, Norwegians, the average age of marriage is older. Again he seeks to show that the percentage of those who remain unmarried increases with the average age of marriage. Thus, the older the age of maternity, the taller the children. The evidence that weight follows the same law has been brought forward by T. Kézmárszky.² The evidence here is as yet even less conclusive. Where the law applies it appears to apply alike to the height and weight of the newborn and also of adults. Lubbock and Woinsky have collected data which convince them that the swords and their handles in prehistoric times, especially in the Bronze Age, were made for people with smaller hands than those inhabiting the same territory now. Petenkofer relates how at the crowning of Queen Victoria the ancient English armor was found too small for those who desired to use it. Pagliani has pointed out that the Italians are taller now than formerly. All these changes are ascribed by Révész to the increasing age of the parents, particularly the mothers.

J. Orschansky³ based his studies upon 2,441 families with 13,277 children. He divided these families into two types—one where the firstborn was a boy, and in these he found boys predominated; the second where the firstborn was a girl and in these families girls predominated. The age of the mothers in the families of the second type he found less than that of mothers in families of the first type. The age of maximal fertility was greater in mothers of the first type than in those of

¹ Der Einfluss des Alters der Mutter auf die Körperhöhe. Archiv f. Anthropologie, 1906, N. S. vol. 4, pp. 160-167.

² Klinische Mitteilungen. Enke, Stuttgart, 1884, 259 p.

³ Die Vererbung im gesunden u. krankhaften Zustande. Enke, Stuttgart, 1903, 347 p.

the second. He concludes that the sex energy of the father prevailed in the first and that of the mother in the second type. He also concluded that the cause which determines the sex of offspring was an hereditary morphological and physiological function of the entire organism, and especially of the sexual nature. Another important conclusion which his figures indicated was that sickly parents were more prone than healthy ones to transmit their sex to sickly children or those that inherit their own constitution. The greater the changeability of a part of the skeleton the greater is its influence upon hereditability of that part. Men show a greater variability and women more stability of skeleton. The length of children at birth increases with the age of the mother, reaching its maximum when she is twenty-eight, which he thinks marks the apex of her greatest power to transmit her own qualities and even her own sex. We may regard every child of greater body length as a representative of the male type. There are more sickly children among the firstborn than among those born later. If both parents are feeble the later children are more likely to escape the inheritance of their disease. Nervous parents have a special proclivity to transmit their sex and their type to children, especially to the sickly ones. There is greater danger of progressive degeneration when the father is sickly than when the mother is so, more for boys than for girls, and this tendency is greater for those parents whose diseases are organic than for those suffering from functional troubles. Similarity is more uniformly divided in healthy families, but in sickly families there is a predominance of similarity of boys with the father.

G. Heimann,¹ foreshowing the dangers of tuberculosis for both mother and child, urges that physicians should prevent all such births by causing abortions. He also shows that every individual and moral motivation should be used to its fullest extent because of the strong propensities it patents of this disease. C. Ehrenfels,² of Prague, thinks even monogamy,

* ¹ Das tuberkulöse Weib in der Schwangerschaft und der Arzt. Medizinische Klinik, 1907, vol. 3, pp. 538-544.

² Die konstitutive Verderblichkeit der Monogamie und die Unentbehrlichkeit einer Sexualreform. Archiv f. Rassen- u. Gesellschafts-Biologie, 1907, vol. 4, pp. 615-651 and 803-830.

which has done great good, must be modified to save the race. He doubts Westermarck that this has been the chief fashion among primitive men. Hence he tentatively suggests a new procreative hygiene and sex morality. He would have boys studied very carefully through all the school grades and have all modes of education adjusted to bring out their best points of character. Those found to be superior should be allowed to revert to primitive conditions where the best male qualities, courage, prowess, idealism were stimulated to win the female and a few such *élite* specimens should not be limited to one mate of the other sex. The chief work of the school should be to standardize the best potential parents. The same should be the goal of the army. All should be constantly judged and compared with prize bonuses and so forth for virile selection and preventive measures against the multiplication of the lower types and should be constantly kept in mind. He insists that love antics among animals and among primitive men are not simply to win good will but so that the male can be potentialized. These radical views have at least been listened to in Germany.

No doubt child marriage is a potent factor of race deterioration in India. Of ten million, from five to ten years old, one fifth were married and half of those between ten and fifteen. These unions with older men result in precocity and early rob girls of their freshness and weaken their maternal functions. Thus the system decreases fertility and some think makes this race so susceptible to every plague and pestilence and paralyzes the will in famines. This, Ibidsson thinks, explains the fact that three hundred million people have tamely submitted to English dominion and extortion.

J. Müller¹ thinks that we must revise the ideas of primitive marriage that have come down from Bachofen through MacLennan, Lubbock, Morgan, Post, and Kobler, and argues for a period, monogamy before totemism, group marriages and *Mutterrecht*. On the contrary, promiscuity, whether as a community of wives or of hetairism, does not exist, but everywhere there is a tendency to durable unions. If incorporated by the so-called higher races, we often find an acute

¹ Das sexuelle Leben der Naturvölker. Grieben, Leipzig, 1902, 73 p.

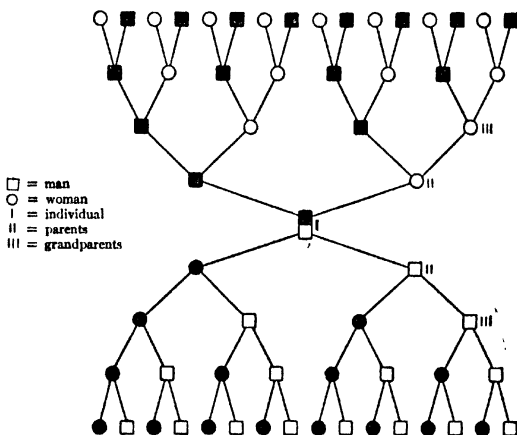
ethical sense; "a fine ethical sense and a heroic self-sacrifice that gives us with a millennium of culture much to learn and to think of." There are very few of the lowest races who do not refrain from sex relations during both pregnancy and lactation, although this custom has been one of the motives of polygamy. Nearly every race has a long list of restraints upon the sexual instinct which are often exceedingly effective. Marriage can only be within certain limited and carefully defined degrees of relationship. The Aztecs required a suspension of the marital relation for four days after marriage. The initiations at puberty often reinforce with cruel sanctions the motives of continence. There are long sex disciplines that precede marriage. Hardships, wounds, fasts, vigils, delays of many kinds are enforced upon people who are often abject slaves of custom, and all these vestiges originated in the profound sense of the necessity of self-control. So the celibate orders which abounded in ancient Egypt, in India, in Buddhist lands and elsewhere illustrate the same effort. There is plenty of evidence that monogamy and asceticism are the aboriginal possession of early man and that many, if not most of the baser forms of sex relation came later. R. Rocholl¹ well says, "The more material we acquire for the study of lower races, and the more we understand their states of mind, so much more sense and reason do we find among them."

Pedigrees and genealogies furnish very important data for the study of eugenics. Most are naturally more interested in the history of their own families than of others and it is surprising to see how in recent years studies of real scientific value in this field have taken the place of the old type of family book made up entirely of names, dates, and places. What is now sought is a record more like what physicians wish in seeking to trace the hereditary symptoms of their patients except that the eugenicist is more interested in tracing back the good traits. Mendelism has not only given a new impulse but taught us how to make these studies more profitable. W. L. Lütgendorff-Leinburg,² e. g., advocates systematic

¹ Philosophie der Geschichte. Vandenhoeck, Göttingen, 1878-93, 2 vols. See vol. 2, p. 485.

² Familiengeschichte, Stammbaum und Ahnenprobe. Rommel, Frankfurt am Main, 1890, 129 p.

genealogies, calendars, registers, family histories, trees, etc., and would have every great family organize and elect a chronicler who should gather and tabulate all available facts concerning every member of it, living and dead. The family archives it would thus develop could support each other by exchanges and could correlate indefinitely with related branches to the end of greater self-knowledge for each individual member. This would be of great service for the further study of heredity on a broader human basis and would supplement history and furnish those who are to write in the future with valuable data. J. Grober¹ describes how in the sixteenth century German noblemen began to make general efforts to preserve their pedigrees, although this was done very crudely. Recently attention has been called to the high biological value of properly kept pedigrees by men like Bollinger,



GROBER'S DIAGRAM SHOWING HOW NUMBER OF ANCESTORS INCREASES FOR EACH INDIVIDUAL.

Martius, Lorenz, Strohmeyer, Kekulé, von Stradonitz, etc. The number of our forebears doubles every generation. In

¹ Die Bedeutung der Ahnentafel f. d. biolog. Erblichkeitsforschung. Archiv f. Rassen- u. Gesellschafts-Biologie, 1904, vol. 1, pp. 664-681.

fifty-seven generations we have 130 quadrillion ancestors, or two raised to its fifty-seventh power, which is far more than all the men now living on earth. The above numbers are too large because they do not all represent different persons—that is, the same individuals often recur as is seen in the marriage of relatives. Lorenz has figured out what he calls ancestral loss. In fact, the whole human race is in a sense related or else it would not be one species. How is this connected with the monophyletic theory? All individuals who are not fertile are excluded from every ancestral table.

It is a very great question as to whether we inherit equally from each one of the ancestors in one of the above rows and what are the laws of reversion, prepotence, sexual transference, etc. Moreover, in this way, too, we can study hereditary *Belastung* and if we have a comprehensive table can get good ideas of morbid tendencies. Often now the entire mass of heredity is so distributed that one half is ascribed to the parents, one fourth to the grandparents, one eighth to the great-grandparents, and so on. Whether this numerical distribution is correct it is hard to say, but it is a convenient scheme. Atavism may even play a great rôle in the origin of new varieties. Variation does more than simply add and subtract. We ought to be able to estimate hereditary values and draw laws concerning the origin and decay of qualities in general, of the effects of inbreeding, etc. All these qualities seem to be transmitted without any general tendency to enlarge the germ cell. The microscope cannot discover any distinction in the structure of the cell of different species to show differences of race or family. Parents transmit to the children their protoplasm and in the early stages of life the loss seems to be about the same whether for an animal low or high in the scale, or even for plants. Kekulé has made special genealogies of the extinct families of the Spanish Hapsburgs.

By blackening the dots in the preceding diagram to represent different diseases we ought to be able to show their laws of transmission.

Professor R. Sommer, of Giessen, well known for his writing on psychiatry and criminology, has traced ¹ a family named

¹ Familienforschung und Vererbungslehre. Barth, Leipzig, 1907, p. 232.

Soldan from a Turk who settled in Germany in 1300, A.D., down to the present, giving some record of several and a fuller account of fourteen of his descendants who attained more or less eminence. He finds most of those members of this family whose lives afford sufficient data for judgment characterized by high-mindedness, active artistic ability and a unique and vivid style. A number have marked gifts for physics and mathematics, and those who have left books or other writings behind were endowed with a lively imagination, a copious vocabulary, and a love of detail or history, topography and natural science. To what the writer thinks a family propensity to keep pedigrees and write family histories, the author owes his very exceptionally copious genealogical material. Pronounced individuality and a passion for personal freedom made them all, for generations, ardent Protestants. Perhaps their most marked trait was a gift of optic, plastic representation which crops out over and over again and seems to have been transmitted to and through the female members of the stirp. While no very solid inference can be based on one family, however large, and while even this record includes but a few of all the descendants of their Turkish ancestor, the author believes it to be of value. It seems to show anew that every individual is a branch of his family tree, that talent is often innate and may become patent or remain latent and unsuspected according as circumstances favor or retard. The power of adaptation increases with endogenous variation and where there are reversions, they are often to the traits of the mother's ancestors. Perhaps in man as in plants, hybrids contain two kinds of germs; one that reproduces hybrids, and another normal individuals with dominant and recessive qualities. Sommer would have us all develop an intense consciousness of family and even race and keep in permanent form a register of the items of biological importance in our family to be transmitted to our remotest offspring. He even desiderates a full characterization of the conditions of conception, pregnancy, and confinement, as well as a record of childhood, its education, important hygienic and cultural experiences, how the crisis of adolescence was achieved, with memoranda of courtship, wedlock, tastes, achievements, illnesses, and death.

Dr. F. A. Woods¹ made a careful study of 832 members of European Royal houses, incidentally referring to no less than 3,312 persons. Of each of his preferred lists he quoted the adjectives and other characterizations used by historians and biographers as the basis of his estimate and thus divided his kings and queens into two series of ten grades each, one for mental and another for moral qualities. He finds that it is very hard to find any information of the pedigree of even royalty on the maternal side, family trees being usually reckoned in the male line. The study of heredity, however, requires equal knowledge of all the ancestors of the backward diverging line. Woods picked up every individual in the pedigree so far as he could, and in this way considers the Royal Houses of England, Germany, France, Spain, Austria, Russia, Sweden, etc., with the aid of many portraits and with considerable use of Karl Pearson's methods, but rather in Galton's spirit. He concludes that neither luxury nor close intermarriage has produced degenerate royal families; that is, that there is no decadence in them due to their exalted position *per se*. Pollutions have arisen through the relation of male members with degenerate families. While some branches decline, others have steadily improved. Perhaps no other 800 random names of a class would yield the twenty-five world geniuses he finds here. His study suggests that kings waged war leading to a survival of the fittest to attain their position, that their exclusive ranks were recruited by fresh grafts from vigorous personalities who won their way into the royal field. Thus the very formation of such a family is due to selection in ability, the first tenth on the virtue scale, and *vice versa*, showing the distinct correlation between mental and moral traits, and suggesting that improvement of each tends to better the other. The inference here is that riches and luxury do not make for degeneration. Pearson showed that commoners do not mate pangamously, but like tends to choose like assortively, and even found that husband and wife in some traits are more alike than are uncle and niece, or than first cousins. Woods finds nothing to refute this view, but his studies do not sustain the theory of free and thorough blending of qualities, but afford

¹ *Mental and Moral Heredity in Royalty*. Holt, N. Y., 1906, 312 p.

many examples of at least partial alternative inheritance. Heredity he thinks "almost the entire cause of mental achievements of these men and women, and that environment or free will must consequently play very minor rôles." Environment is "a totally inadequate explanation" of intellectual life. When strong contrasts are found among the children, they are always found among the ancestors, but the environment affects lower organisms most and higher attributes least. Selection is of prime, and education of only subordinate, importance. Not enough is acquired to be inherited. Traits found in one parent and in half the ancestry will probably appear with equal force in one out of every two descendants. Traits possessed by neither parent, but by all the ancestry, would also have one chance in two of appearance in the children. Mental and moral qualities blend so little that a child will probably resemble rather completely one of his ancestors rather than another.

Few more practical or striking illustrations of heredity are known than those due to the campaigns of the First Napoleon who, it is estimated, was responsible for the death of from two to three millions of the strongest, most able-bodied young men, the very flower of their respective countries. These millions who perished on the battle field left few or no offspring. And all soldiers, even those who return, leave weaker members of their sex home to propagate offspring. This is pulling up the corn for the sake of the weeds. One result upon France of these long wars is that the minimal stature which France requires for her soldiers has been twice reduced so that *Figaro* not long since represented *La Grande Nation* extending her hands and saying, "Suffer little children to come unto me for of such is the Army of France."¹ Wars thus always interfere with eugenics by cutting off the best during the years most favorable for procreation, while promiscuous charity, on the other hand, interferes by preventing elimination of the worst and often enabling them to propagate with

¹ See Otto Seeck's *Geschichte des Untergangs der antiken Welt*, 1901-1910, 6 v. In his chapter on the extermination of the best he has shown how not only France but Greece, Rome, Babylon's decline and fall came from want of men. "*Vir* gave place to *homo*." See also D. S. Jordan's *The Blood of the Nation*. American Unitarian Assoc., Boston, 1903, 82 p.

great fecundity. We must not, however, forget that the army now in the best nations, e. g., Germany, is a splendid school for both body keeping, physical, mental and even moral development especially under the new educative policies, while, especially in times of war, the armies are great schools of courage, discipline and patriotism.

Thus I have in the above merely sampled a few of the salient facts and fields of eugenics only in order to raise the question of the pedagogic place, value, and method of this new subject in an educational system. I hold that its rudiments should be in some way imparted to every boy and girl in the early teens and that it should be continued in high school and in college. Rightly taught it gives a new apperception organ for history, for sociology, and reveals the biologic basis that underlies all human institutions and achievements. It enables the pupil to understand, too, a number of the most basal motives of morals and religion. It sublimates the intense natural interest in sex during the teens, long-circuits, elevates it, and besides great intellectual there lie in it also even greater moral possibilities. It broadens the historic sense by showing the individual's relations to both his ancestors and to posterity, and inculcates the sacredness of the immortality of the germ-plasm which must be served as a center of supreme interest in all human affairs. Nothing has opened to the pedagogue such a sudden, new wealth of matter and method or such a new mine of interest, which it now remains to work for all it is worth. This part of sex pedagogy is perhaps as remote as possible and in many respects is a diametrical opposite of the pedagogy of a sex disease, for the former opens one of the most encouraging vistas into the future and suggests that *circa* fifteen hundred million people alive on the earth to-day are not only merely a handful but are only pygmoids and perhaps mattoids of nobler generations of men that are to tenant the earth long after we are gone. Eugenics, too, is now greatly needed to counterpoise relatively every excessive emphasis laid by educators of all grades upon the social aspects of life and training. This on the contrary reminds us that individuality has its needs and duties and must be more effectively stressed to bring things again to harmony. Again, in our close relations to our fellow men we must not forget our fore-

bears to whom we owe either adoration, like the Chinese ancestor worship, or curses, like the sad hero of Ibsen's "Ghosts." If we would utilize all the natural interest which has limitless possibilities of quickening not only the mind but morals, it may be that we should be able to find and keep in mind a settled but very important line, which men and especially women need to know, between normal effort and over-drawing our powers so that we shall not take out of our system more than it can bear.

Only by many kinds of effort and by trying many methods shall we be able to develop the true pedagogy of this fascinating subject. I hesitate to append here the method which I myself have repeatedly used to introduce a single aspect of the subject with high-school girls and boys together. I first ask: How many of you have grandparents? How many can name all four of them? We then find out how many who have them were born during the civil war, 1860-65, and how many of them died in the war. We then go back to the eight great grandparents and to the sixteen great great grandparents. This takes us somewhere near the year 1800. We can then go back five generations in which the pupils had 32 ancestors, near the strong minds of 1776 and the Declaration of Independence. Surely with so many in this generation nearly all whose families were then living in this country must have had revolutionary sires. Thus we go back always noting the important historical events, the days of Cromwell, Columbus, the Magna Charta, and back perhaps some thirty generations till we get to A. D. 900, the day of Otho the Great. This tends to bring a sense of vital connection with the past and a certain pride of lineage.

If, instead of recording three generations per century we record four as is nearly right with the low classes, the increase is still more rapid. Now the wisdom and folly of pedigree can be mentioned. All might be exhorted to keep family registers, to look up old Bibles, to interest themselves in their own family tree and a certain few lessons might be suggested. Jordan says that probably all young people to-day have had among their numerous ancestors certain kings and queens, but adds that they have also had murderers who have been executed on the gibbet. How we all hope that most of our ancestors were strong and healthy in body as well as good! How we wish they could foresee our interest in their health and virtue! They, however, have not fated us, for there are sports, geniuses from low families, as well as stupids from good ones. Haeckel figures five million generations in man's pedigree. We all inherit many great possibilities from this dense cloud of witnesses that have gone before us. One ounce of good heredity is beyond all price. All the best things in us are there because our ancestors did not drink,

debauch themselves, or lay the dead hand of heredity upon us to handicap or blight our lives.

Now from the past let us turn to the future. Here we have no facts or history but only possibilities. Suppose a pair married to-day in 1910, produced and reared 4 children. Thirty-five years later, in 1945, their children marry and rear 4 children. In 1980, or 35 years later, these marry and produce 4, in 2015 another, in 2050 still another, in 2080 yet another, and by 2120 another generation is produced. At this latter date, then, the single pair married to-day would have produced 128 offspring in a single generation, or 252 offspring during all these generations. We have only to figure this out to carry this simple doubling on, reckoning some 3 generations per century, and if the rate of increase kept up, before the end of the 26th century of our era, people marrying now would have over 2,000,000 offspring in a single generation. Some of you may be thus prolific. If your families were larger and all lived you would have a still larger number of descendants. But of course this will come to but very few of you. Some will die, some will never marry, some will have no, others few, children, and these may die. Think how all who come after us, whether few or many, are entirely dependent upon our health, upon our virtue, and think how sad it is to often see people die well on in years who leave no children, so that the line and perhaps the very name becomes entirely extinct! Backward it goes to the very dawn of life but here the family becomes extinct. This often happens here in New England in the region of abandoned farms.

Thus, we realize that the fifteen hundred million people alive to-day are only a mere handful compared with those who are to come after us. Of course there have been constant extinctions. Animal species have died out for very many reasons, because they did not fit or adjust to their environment, were weak, diseased, preyed upon. Human institutions die. Not a living person to-day worships Jove, who for the proudest races on earth in classical times was father of gods and men. All this teaches that we are simply trustees of our lives. Our faculties constitute the crew to navigate the ship from the port of departure, which is birth, to the port of destination, which is death. Now if we overdraw our energies or squander in selfish indulgence or sin powers that were meant to insure the life, health and happiness of posterity, we are like sailors that mutiny, break into the hold, loot the cargo and set up as pirates. Honor, or the instincts that make a gentleman and a lady, when we interpret them aright, is living for the interests of the unborn. As to charities, we, of course, need to help the defectives, for it does us good. But the best ought to survive and to receive most care. In many lands to-day the human harvest is not satisfactory. This must change or these nations will go the way of ancient Rome and Greece, or Burbank's plants that would not develop higher species. Such races, like condemned machinery, will go to the scrap heap or the

dump. Nations must not breed from inferior specimens any more than farmers, for neither can long endure the law of diminishing returns.

Sex and Its Pedagogy Before Puberty.—It has generally been assumed that in the regimen of children before the teens, sex needed little attention because it hardly existed. It was enough to protect them from local excitement and keep them from seeing or hearing things gross or indecent. Recent investigations, however, indicate that this is a very grave mistake. Not only has Bell,¹ who collected scores of cases of ardent love life in children under twelve, even, indeed, as young as five, three or even two years of age, shown that the affection was manifestly more or less of the adult type, but Freud² has described a boy of five years whose chief interest centered in sex, which became his chief apperception organ.

C. G. Jung³ gives a pathetic case of a four-year-old girl who, incited thereto by the birth of a brother, developed moods of reverie, dreams, and manifold questionings concerning where children came from. There were several partial theories that evolved in her brain: one was that when old people died they became little children. When asked just before what she would do if a brother came that night, she declared she would kill, i. e., remove it. When she first saw her mother afterwards, there was dismay and a disposition to keep away, and a very cool reception. One theory, however, was that her mother now must die because a new life had come. Toward the uniformed nurse she was very hostile at first. She insisted that the brother did not belong to her; treated her doll as the nurse did the baby; hummed reverie songs unconsciously of a new melancholy tone, which analysis showed were introversions. Jealousy was plain. Again, father and mother were called liars. There were many questionings how the nurse got the baby, what the mother had to do with it, whether she would be like the nurse or like the mother whom she was sure did not get the child in the same way as the nurse did. There was a strong sense that something was being concealed from her and great resistance to this. There were various infantile devices for securing love by force or strategy, such as crying and calling the mother by night, for which the Messina earthquake was

¹ Sanford Bell, A Preliminary Study of the Emotion of Love Between the Sexes. Amer. Jour. of Psy., July, 1902, vol. 13, pp. 325-354.

² Sigmund Freud, Analyse der Phobie eines fünfjährigen Knaben. Jahrb. f. psychoanalyt. und psychopathol. Forschungen, 1909, vol. 1, pp. 1-109.

³ Association Method, tr. by Dr. A. A. Brill, of New York. Amer. Jour. of Psy., April, 1910, vol. 21, pp. 201-269.

held responsible. There was great fear that introversion was in danger of becoming a neurosis. Finally, she was told the truth but found it hard to understand how the infant could get out of the mother's body by itself—it must come from the mouth or some opening in the breast—but this was so hard to understand that she fell back to the stork theory for a time. Slowly her curiosity was directed toward the lower part of the body and then there was a long and persistent error which was hard to control as to the orifice it emerged from. The child evolved a concept of a big brother, which seems to have been to her what her father was to her mother. This big brother is brave, lives in dangerous Italy, so that the earthquake fear vanished. Among other children she now became an apostle of the doctrine that every child grew in its parents. The father being ill one day in bed was thought also soon to have a child. A symbolic dream of Noah's ark, where animals came out from beneath instead of as in her real ark from a lid in the top, imaged a rectification of her own ideas. She soon developed a wish to be present with her parents alone and sit up with them late at night, the motivation of which of course she did not understand. Then came back the earthquake dreams, then a curiosity to see spring when the flowers came out, which she associated with the way the brother arrived. Evidently the flowers and earthquakes had some association. Later she began to throw her doll into the closet assuming that thus she had come nearer to the question that was agitating her. A favorite game was putting a doll under her clothes and drawing it out, which was evidently a kind of question. She associated a woman about to bear a child with a flower; proposed to swallow fruit to have a baby; this marked the beginning of the subconscious quest for the ulterior origin of babies. There were several painful dreams, that she was crushed, buried, drowned, showing that there was again fear in the air and resistance against transposition on the parents, showing that much love was again converted into fear, but now the suspicion was directed against the father, who must know the secret. This is common in *dementia praecox*. It had to be explained to her that eyes were not planted in the head, for this was the first form of the seed theory. Many were the questions as to how the baby got into mamma. Finally, the father explained delicately and there was much exultation with the assumption that she knew but the mother did not. Out of these elements and the tensions may arise many forms of precociousness and neurosis, if these complexes are not attended to. There is great suffering from errors here, but wisdom is very hard and with feeble children there is a necessity of great discretion. The literature in this field sheds much new light upon the psychogenesis in the individual. Hereditary moments incited by the various items of experience pop up in the most fragmentary way, now in a dream, now in a reverie, now a question, now a very conscious anxiety that may be prolonged indefinitely, and only after considerable time does the

finished product of clear and simple knowledge in this field arise. Men, and especially women, are essentially organs of heredity, so that this knowledge is of the most vital consequence for life, and plays a more organic rôle in the evolution of the soul than any other type of knowledge.

The chief evidence of active sex life in young children, however, rests upon the results of psycho-analysis, which has led Freud and his now rapidly growing school to the conclusion that nearly all neuroses, if not most of the psychoses of later life, rest back upon and have their ultimate origin in some lesion or trauma of the *vita sexualis* before puberty, perhaps averaging about the age of eight or nine. It is surprising to see how many cases of these disorders, which constitute so large a part of the literature of this school, started in some strong and sometimes sudden sex experience by which topics in this field were forced upon or kept in mind in an abnormal way or to an excessive degree. Nervous children, especially girls, and most of all those that are very delicate, if not slightly neurotic, are peculiarly vulnerable almost from infancy to these influences. This new conception now evolving is that what we have been accustomed to call sex is a composite of many elements, some of which are manifest almost at birth, and that these components develop more or less independently at first, that all tend to have their fling, one after another, and then some are repressed by shame or by censure and perhaps fall out entirely as do some rudimentary organs that vanish as the body grows. Others are only inhibited in their outward manifestations but persist, often with great vigor, below consciousness, where they are in all stages of submergence, often quite beyond the reach of voluntary attention. The rest of these components are during puberty, if it is normal, united and organized together under the leadership of the sexual zone and become known as sexual. These components as they exist in children consist of what is common to both sexes and constitute, then, sex neuters, and they can later enter into the constellations of either sex, though in different proportions. These components have their outcrop in specific traits, e. g., passionate sucking (*Lutchen, Ludeln, and Wonne-saugen*), interest in all that pertains to both excrementations, various auto-eroticisms which may later evolve into self-abuse. Then

from being self-caused these propensities take on more objective forms, chiefly three: (1) extreme aggressiveness, which may on the one hand sink to sadism or be sublimated and spiritualized into creativeness, originality, later on; (2) abnormal passivity, receptivity, which may lapse to masochism or the desire to suffer pain and rise to heights of receptivity, even to divine influences; (3) exhibitionism or the impulse to show off, which has many high and low forms. Each of these crude instincts may act more or less ethically and become an independent source of pleasure, which is at bottom or else merges over into *libido*. Nothing is so plastic as these elements, for in themselves and in their combinations they contain the very best and the very poorest traits of human nature. If the great extension of our former views concerning sex thus called for is correct, then the young child is in a sense even more dominated by sex components than the adolescent, for there are more of them since some are eliminated or repressed before the age of reconstruction and they are both unconscious and independent, and hence are stronger. Again, for these reasons they are far more prone to lapse to physical disease, the symptoms of which are precipitations of erotic feeling. All the horrible perversions of sex, too, are only exaggerations or aggravations of tendencies normal to every child, whereas, on the other hand, art, science, religion, all of them are surrogate satisfactions. Thus, only part of the original *libido* factors are organized to conserve the function of procreation, and the rest make up the greater part of human weal or woe. If these new views are correct, it follows that sex pedagogy must not only begin in the cradle but is cardinal for the education of the feelings, will, and intellect, and that sex, not as we now know it but in this larger sense, contains the promise and potency of life, that the complete man or woman is a complicated product of many devices that are slowly wrought out during many metamorphoses in order to accomplish in the end the one and supreme goal of life, viz., the generation of our kind. From the first moment after birth, Nature begins to prepare the infant for future parenthood and all else is secondary and tributary to this. To those who study this new dispensation of sex and do not know children in a deep and all-sided way, it seems unwarranted; nor to those alienists

who think that the patient can judge of his own states of mind rather than that their interpretation is the goal, will this seem satisfactory; nor will it to those who think that if we admit that sex perversions originate in germ in all young children, our thoughts of them are necessarily degraded. But to those who understand how idealism and imagination root in sex, as does most that is best in adult life, this view will exalt and ennoble childhood. This is not the place for details concerning the psychological view that has brought more unity and insight into the very nature and operations of the soul, and the mechanism of the conscience than any other in our generation. It marks the end of the old and the dawn of a new era. It is the most triumphant vindication of the genetic mode of conceiving the mind and marks an epoch in psychogenesis. This is true quite apart from its bearings upon sex, for it includes a far wider domain which cannot even be glanced at here. Into the whole domain of sex, however, it brings sudden order and harmony by showing the relations between the different morbid manifestations among themselves and between these and normal activities and coördinates many factors, the bearings of which were before entirely unknown, obviates persistent misunderstandings for both health and disease, and gives sex, which had been neglected by all contemptuously and dismissed by some psychologists as of the slightest significance, its rightful and dominant place.

Prepubertal sex pedagogy, therefore, has its own peculiar problems, some of which, however, can hardly be stated definitely save in a medical treatise. In general the inculcation is to avoid all erethic states, even in the nursery, beginning with those of sucking itself, which the rubber nipple very distinctly favors. Parents must realize that the masturbatory diathesis may be cultivated by excessive coddling, by frictions anywhere, especially pattings and strokings that tend to crescendo or culminating sensations. Habitual constipation, too, is a direct provocative and can sometimes be more or less voluntary even if unconscious in the interests of these hedonic physical experiences. Coprophilic tendencies have perhaps a natural place and stage but they normally soon abate beyond the power of a revival even by disease. Intense spasms of feeling and emotion, periods of phrenetic aggressiveness, pave

the way for erogenisms. The love of being handled may become abnormal and in such cases has its own dangers. Nudity is often a passion of children and has a unique pedagogic value of its own in its place which the Spartans, who required periodic stripping to see whether youth were vigorous and virtuous, perhaps understood how to utilize. Freud has himself dealt with some aspects of this topic.¹ He has little sympathy with the fear that simple explanations made to young children will awaken premature or abnormal interest but thinks concealment particularly calculated to do this. It is false that children have no interest or intelligence for these matters unless it be artificially awakened. Nor would he have this instruction conveyed indirectly. In an interesting letter, Multatuli (edited by W. Spohr, 1906), although admitting that thought should be kept pure, recognizes that this is impossible under present conditions, and urges that children strongly and early come to feel that something is being concealed from them, and therefore their curiosity is kept at unwholesomely high pitch and that this artificial tension both heats the feeling and corrupts the fancy. Parents, he says, live in a fool's paradise. The parts directly involved are by no means the only ones in children that mediate sex sensations, which are often auto-erotic. Now it is the excessive developments of these uncorrelated elements and the errors in their pubertal organization that cause perversions and neuroticisms later and but for *Geheimtueren* many of these dangers could be avoided. The zest of the child for the riddles of this aspect of life are awakened very early. They should not be repressed too abruptly by being called dirty or guilty.

Perhaps next to interest in organs is the problem of the origin of children. Here Freud quotes a letter of a motherless girl of eleven and a half to her aunt, asking with the greatest naïveté whether the stork found children in the ditch and if so, why they are never seen there and ending, "I beg you, write to

¹ Sigmund Freud: Zur sexuellen Aufklärung der Kinder. Soziale Medizin und Hygiene, 1907, vol. 2, pp. 360-367. Die infantile Sexualität, in Drei Abhandlungen zur Sexualtheorie. Deuticke, Leipzig, 1905, 83 p. Origin and Development of Psychoanalysis. Amer. Jour. of Psy., April, 1910, vol. 21, pp. 131-200. Über infantile Sexualtheorien. Mutterschutz, 1908, vol. 4, pp. 763-776. Charakter und Analerotik. Psy.-neur. Wochenschrift, 1908, vol. 9, pp. 465-467.

me fully, for you surely know where they come from." Later this little writer became neurotic and psycho-analysis showed that one element in her neuroses was the imperative *Grüßelsucht* concerning these more or less unconscious questions. The intense natural craving for knowledge at this stage is probably universal, and how rarely it is met is illustrated by the case of a lady teacher in the grades who found on her desk a letter signed round-robinwise by five of her best girls from ten to twelve years old, which read, "Please explain to us how men originate." The teacher was confounded and did not know what to do. She finally took the note to the master. He thought it too grave a question to deal with upon his own authority and took it to the superintendent. The superintendent was no less nonplused and appealed to the school committee, who after sapient deliberations, suggested that the teacher ask the parents of these girls to answer the question to their daughters. These school authorities felt themselves either too timid, too ignorant, or unauthorized to give the desired information.

Love and hunger are often called the two master impulses of life. The food quest absorbs a large part of the time and energy of animals and of men. This has long been understood; but only very lately, thanks to many special studies, are we realizing that the constellation of sex activities takes a hitherto undreamed-of proportion of energy for its solution during all the years of most rapid physical and mental growth. In no field is ignorance so dense, and false explanations that have to be tediously rectified or painfully moulded, so many. The stork legend and a score of foolish nursery inventions on this plane that appear in our *questionnaire* returns are at first accepted as an answer to the most vital and first of all the great questions which the child puts its parents with a faith so implicit that, when these silly answers begin to be doubted, a deep distrust of father and mother is implanted. They have given a false answer to the most serious of all the questions children ask them. Some children oscillate for months and years between accepting the myths given them on parental authority and some other explanation of the street, perhaps very offensive to them, and weak ones often grow neurotic under the strain. Some become clever detectives and cross-examine wherever

they can to find out if their parents lied, and continue to change, modify, and perhaps revolutionize their conclusions in this field for a long time. Often the alternative view that the child came from some aperture in the mother's body is put in so revolting a form that they cling to the stork type of theory long after they should have known better, and are more or less stultified thereby. Sooner or later even the neglected or self-taught child is convinced that its parents deliberately lied to it and conspired to do so.

Now arises the question why they did it; and here begins another train of psychic processes which may undermine love and respect and, especially with neurotic children, may lead to the view that they are not true offspring of their parents. The child is now launched upon a troubled and pathless sea. Where do babies come from now that the testimony of the parents is proven false? Or are the new theories veracious? Almost incredible are the number of tentative hypotheses taken up and then abandoned, involving a large amount of merely unconscious cerebration that might have been better used. It is all so strange, secret, incredible; and especially to girls as they often hear it, is nauseating and perhaps cruel to certain souls; and to most in some modes, the monstrous and distorted new ideas darken and sadden life. Children cannot realize that they were born as they are told; and the mother, and later the father, when his agency is known, seem degraded by the sex relation. Children often openly resent the thought of all such practices by their parents; while at the same time sometimes secretly spying and trying to find out. At this stage, if too much is too suddenly seen, weak nervous systems are sometimes indelibly wounded thereby.

By the dawn of the school age, the child is already usually alert, conscious and curious, boys more openly, girls more covertly. Both accumulate a considerable body of misinformation which must be slowly and tediously worn away by growing knowledge. I would not say, with my former German teacher of physiology, that two thirds of the total psychic processes of boys are for years concerned with sex directly or indirectly; but the amount of mentation that goes on in this field is incredible to most. We adults forget it because new insights have submerged the traces of old vagaries as in

no other domain. Moreover, the type of psychic activity is uniquely intimate and as unconscious as it is intense. Again, psycho-analysis which penetrates down to the earliest strata of psychic evolution always finds it, and the psycho-analyses conserve these lost stages of development in which these patients have been arrested and which are magnified. Thus the long catalogue of errors that uninstructed youth sometimes go through touching sex and reproduction are not only pathetic, but they are instructive as furnishing the key to many of the perversions in this domain. These latter are so manifold that the vast body of clinical literature now in evidence seems to compel us to the conclusion that there is no act or object that has not in it some individual or race phallic significance or been sexually erethic. All the sex aberrations are now pretty well explained by their genesis, in some stage of which they all arise by arrest and magnification which, when traced to its source, is found due to an overstress of some one instrument in the sex symphony or an arrest at some one of the many phases that not only abnormally but probably normally must precede full maturity. All these facts certainly teach us that this vital department of human life is more or less disorganized or at least threatened with decadence and needs special attention.

There are very many children, having learned that babies emerge from orifices of the parental body, who build up elaborate and fantastic theories that they come from the mouth, ears, nose, etc., in ways that seem to adult common sense like the systematized delusions of certain paranoiacs. Another group of weird theories centers in the question of how the mother gets the baby; and here cluster another felted or planktonlike mass of foolish speculations: by eating certain food, by prayer, washing, wishing, certain exercises, regimen, visiting certain places, performing certain religious ceremonials. Almost numberless are the popular ideas still found among the lowest savages concerning the immaculate conception; and not a few of these have their recrudescence in the children of to-day. Then comes the long labor of soul to find out just what the father does and what paternity means.

Strange things occur in the soul during this ferment. Sweet and innocent young maidens spin reveries that their

father may have been some other man—a great prince maybe—and that the fathers of their brothers and sisters were still other noble personages, with no thought of what this would imply as to their mother's character or conduct. Indeed, the whole psychology of sex is full of flaring absurdities, contradictions, and partial views now filling the whole horizon of consciousness and then alternating to an opposite standpoint as the old one is abandoned. There are feelings that are insistent; and then comes a psychic ebb, and the contradictory mood becomes supreme. Here resolutions are frequent and made with all kinds of solemn vows but they are most fragile. Insights for the moment most satisfying are in another abandoned with aversion. No instinct is so little in need of instruction in regard to pragmatic essentials, but none is so blind and aberrant in all else. In no domain is infraction of convention so seriously punished; yet perhaps in no field does sin and vice so abound. Hence, tension due to impulse on the one hand, and to restraint and repression on the other, is so great. Just here lies the strain.

As a result of such oppositions arises another psychic peculiarity found nowhere else to such a degree: viz., the effective submergence of experience. With every step in advance, both in insight and information, something, and perhaps much, has to be utterly tabooed, things which society will not tolerate and which must remain absolutely unspoken to one's nearest and dearest friends. Thus much that has been in the very focus of attention and interest is evicted, and the psyche burrows and buries its own dead. Thus, an unwelcome content of mind is forbidden, is not reverted to, is soon submerged and forgotten almost as completely as if it had never been; only in rare cases can it be resuscitated in some hypnoid state in order to vicariate in consciousness for a neurosis which its suppression caused. Having found the way and the truth, the abortive ways are barred. And just so the race at the stage of some prehistoric renaissance carefully scoured away all the traces it could of the old phallic religions that once covered the earth and were the apperception organs that gave sex to everything and interpreted all phenomena sexually. It is the benign influence of modesty and shame that conceals and seeks to obliterate. Thus, children in the very earliest

teens have already forgotten very much here; and a good deal of suppressed knowledge that they once treasured has slowly been consigned to oblivion.

I often see girls of *circa* twelve who go about very quietly, seem demure and often absent-minded, with spells of relative indifference to things once of great interest to them, who are silent in the presence of adults and yet gravitate toward them for companionship in these moods. They are unresponsive, rather imperturbable, often apparently lolling, listless, self-centered, poised, rather repellent of confidences and approaches as if on their guard against self-betrayal. They have no suspicion of what is going on in their souls; though so absorbing is it that there is no part of the soul left to look on with or to remember with. But analyses and neuroses betray this triply guarded secret: they are brooding over great biological questions of the origin of life, sex, death, their own relations to their parents and brothers, musing about marriage, about how to get at the truth to both escape and to penetrate the mesh of conventional lies of every sort culminating with those of sex with which they are encompassed. What and whom can they actually trust? What is really and truly so, "sure as you live," "with your hand on your heart," "by the sign of the cross"? How shall they know the truth of the truth, what they most of all want to learn; and how can they do so without asking and being put to shame, or without seeming ignorant when, in fact, perhaps all assume that they do know? They ought and perhaps do sometimes blush in secret to think of these things; but they cannot escape the insistent questionings. How can their elders be so blithe and cheery if the world is as they are beginning to divine it? How they muse on certain half-incidental words or allusions let fall by the grown-ups, which answer perhaps some of their mute longings; while all the rest of the wiser talk washes over them unnoted and leaving no trace! These pregnant suggestions are pondered in the heart; and thus the girl slowly orients her way to wisdom by them, constantly casting old knowledge once thought precious as rubbish to the void. She will reach the goal in the end; but how vastly much might have been saved her by a little plain, sane teaching betimes? And how this long stage, which is

throughout so very vulnerable to shock, might have been shortened and facilitated!

Whether they are saved to virtue or lost to vice often depends upon their getting or failing to get the knowledge their whole souls are consciously or unconsciously seeking.

"Frühlings Erwachen," by Wedekind (translated by F. J. Ziegler) is a dramatically clumsy attempt to present the tragedy of adolescence for girls who "did not know." The action represents the very crisis of puberty, utterly ignorant, utterly naive, and after the tragic results the girl, who dies, dismaltizes her mother's life by reproaching her that she had not been told. G. Compayré¹ commenting on this thinks with Kant, that sex instruction should largely be an object of public and social training, and so highly commends the French league of doctors and families, and the society for moral prophylaxis. Both lay great stress upon what is designated by the Anglo-Saxon term, self-control.

Thus, children's minds, in fact, are very fertile as well as active here, and they very often develop ideas which later cause great trouble. Often strong natures come into more or less open rebellion against parents' authority on other matters on account of concealment or deception here. Some torture themselves in secret and devise the most grotesque and absurd explanations, which they whisper to each other with some sense of shame and guilt, and this lays the foundations for regarding these matters as repulsive and perhaps nauseating later. These infantile theories ought to be systematically collected and evaluated. Nearly all lose their way for a time, at least, and wander often with great risk and waste of energy before they learn the simple right way of nature. Here very many parents and writers are exceedingly clumsy and ignorant. Freud highly commends Emma Eckstein in "Die Sexualfrage in der Erziehung des Kindes," 1904. Most parents reserve explanation till the latest moment, and then give it in solemn words that are themselves a little misleading, so that instead of learning all as they wish to children must have recourse to forbidden ways. Thought is very often very greatly intimidated in this way. One little boy was overheard saying to his younger sister, "How can you imagine the stork brings chil-

¹Les Adolescents au Théâtre et l'Éducation de la Puberté. L'Éducateur Moderne, 1909, vol. 4, pp. 3-14.

dren when you know that man is a mammal? Do you think the stork brings their children to other mammals?" Explanations should certainly be given before ten or before children leave the Volksschule, and still further explanation should be connected with confirmation. The French are now substituting for the catechism an elementary book which introduces the child into civic life but, strange to say, there is a great gap here. The clergy will never recognize the close relation of man to animals because they are always thinking that man has an immortal soul and that unless he is as widely differentiated as possible from brutes the foundations of moral training cannot be properly laid. There ought to be a rather fundamental reform in this respect.

A. Moll,¹ another of the most eminent experts in this field, says that all must realize that children can no longer be brought up in ignorance of sex matters, which filter in upon their minds through very many and very often extremely obnoxious and suggestive ways. He blames religious teachers for not doing their duty. He thinks that under conditions of modern life the somatic signs of puberty afford no reliable indication of whether or not the intelligence has reached this period, which it often does long before it should. He would trace botanical and zoological processes and wisely says that the child's questions are the very best guide for all the stages and dates, deploring the fact that many who wish to teach these subjects are densely ignorant and some are spreading noxious errors.

Sexual Éclaircissement for Delicate Older Girls.—The evidence is now overwhelming that sexual *éclaircissement* is an extremely critical matter for modern girls of nervous diathesis. The first knowledge of parturition and still more of the act of fecundation is liable to come to them as a shock that causes intense disgust and aversion. To delicate girls in the earliest teens the physical relation of the sexes often seems almost incredibly bestial and not infrequently fills them not only with disenchantment, but with positive repugnance toward the opposite sex. All their instincts and previous training in modesty and shame seem outraged and some girls in our returns when reluctantly convinced, show abatement of attachment for their own fathers for a time and sometimes

¹ *Sexuelle Erziehung. Zeits. für päd. Psy., Path. und Hygiene*, 1908, vol. 10, pp. 145-216.

express pathetic sympathy for their mothers as victims of brutality. Full *éclaircissement* may occupy a number of years¹ and with some it is a very serious matter to effect complete reconciliation with the facts of life, and a few never achieve thereafter complete affirmation of the will to live, or find it hard to accept things as they are. My own data incline me to agree with Freud and his followers that psycho-sexual traumata may become the cause of very grave disorders later, even if they are not always quite so unconscious, so general, or so early as he thinks. He lays stress upon the nervous strain due to the forced association of sex with repulsive excremental processes; but this would surely be greatest if it came early. On no subject, perhaps even religion, is mental equilibrium so likely to be upset, if knowledge is given before the mind is ripe for the mental digestion that is necessary. The sudden, accidental envisagement by exceptional experiences or too pragmatic and early descriptions may readily become the submerged nucleus of grave perturbances; and here our *questionnaire* returns suggest to me a source of disturbance which I think not adequately described or even recognized by the Freudians or others, as follows: Many of the psychic prelusions of sex just before the age of first menstruation are not at all associated in the girl's mind with specific anatomical or functional changes. They are simply rich and strong new tides of sentiment. The other sex acquires new interest though perhaps more at a distance. Love is idealized in purity, heroism, romance, and suffuses life with a golden haze. If it focuses in a person, it is innocent; and even if there are occasional acts of endearment, they are chaste and immaculate. There is reverie, dreamery, perhaps of ultimate mating with some paragon of masculine virtue, fancied pictures of beauty, adornment, devotion, and service. Every religious feeling and aspiration is greatly enhanced and the soul is on tiptoe of faith, expectation, desire to embody every physical, mental, and moral attribute of womanhood and of the race in one's own personality. Now, when into this ecstatic paradisaical state, the crass, brutal facts of sex are

¹ See a rather typical and not abnormal case in E. Stiehl's *Eine Mutterpflicht*. Seemann, Leipzig, 1902, 46 p. Also H. Fürth's *Die geschlechtliche Aufklärung in Haus und in Schule*. Frauen-Rundschau, Leipzig, n. d., 44 p.

suddenly forced by accident or by the advances of a gross lover, or even by something read or told by some elder friend, it may be with the pedagogical passion that all must know it, this sometimes comes with effects that may almost be described as a psychic outrage of a vestal or nun. There are tears, lacerations as the heart revolts toward men, resolutions it may be of perpetual celibacy and disenchantment with life generally. Many now feel at least momentary impulsion to make a great renunciation. Love has perhaps begun to burgeon, even if all unconsciously, and it is now reversed or generalized it may be toward philanthropy, and there is a sense of being blighted and all this goes on with only partial consciousness of it. This, as abundant records show, is for some girls in the teens who are exotically sensitive by birth and overrefined by nurture, almost like the apparition of a mocking, horned, hoofed and tailed devil in Eden. Healthful souls would perhaps in time digest almost any such experience and even delicate ones would do so, if insight came gradually without too much shock. Weakly girls, however, may now acquire a coital or parturition phobia that, opposed as it is to all the deep instincts of a woman's nature for mating and maternity, precipitates internal conflicts that pervade both the conscious and the unconscious spheres of life and involve incalculable waste and sometimes permanent disequilibrium. Thus for many a slender girl, perhaps a trifle anæmic, who has not achieved a full and complete development, internal and external, who suffers and who has general nervousness of whatever kind and cause, is very prone to center the sphere of those functions connected with the transmission of life and from that as a focus it irradiates on occasion into the spheres of nutrition, circulation, respiration, or mentation, may cause some new somnambulant phenomena, dissociation, convulsions, contractures, anæsthesias, fundamental paralysis, fixed ideas, stigmata, tics of many kinds, etc. Happily the weaklings who show these extremes are still relatively few, although their proportion seems to be steadily increasing.

Dr. M. A. Cleaves¹ says that young girls and women

¹ Education in Sexual Hygiene for Young Working Women. Charities and the Commons, 1906, vol. 15, pp. 721-724. See also Dr. F. C. Valentine: Education in Sexual Subjects. N. Y. Medical Journal, 1906, vol. 83, pp. 276-278. *Also

shrink from all discussion of such matters, and as a result their ignorance and credulity make them easy victims. They little suspect the risk to which they commit themselves. Young working women are generally strong enough to face the truth and, if so, it should be taught without bated breath, biologically, and as one of the most interesting, beautiful, and sacred of things. The bare facts are never enough.¹ Some business firms employing many girls also employ one or more physicians to make themselves gratuitously serviceable. Women's clubs should study this problem. Assuming that a new sex ethics may impend it must come very slow and the darker side of sexuality, which may well try the nerve of an expert, should not be overstressed. Nowhere is greater tact and caution necessary. From this we can see that sex pedagogy with slightly premature, delicate girls is often a very grave problem, quite distinct from that for thoroughly healthful ones and for all the sex radically different from that which boys require. Nature doubtless indicates that the period of idealism should have its fling unperturbed by all that seems gross. Pragmatists on the other hand, urge that the fleshly facts be taught first before puberty and that they have the right of way, even if the wings of the later idealism are clipped a little, and that unbridled romance is dangerous because of the perils of the rude awakening to which it may be subjected. Here, however, we are hard up against the limits of present knowledge and perhaps the best that can be said is that each girl should be a problem by herself. Most, however, do and will now learn the worst before puberty and will yet idealize after it comes and associate and coördinate between the two in some way later as best they may. Thus, the task of the instructor, whether parent or teacher, is to accept the inevitable situation and see that knowledge acquired is sound and not perverse,

Dr. A. H. Smith: *The Prophylactic Value of Normal Marriage*. Medical News, 1905, vol. 87, pp. 1163-1165. Also F. Griffith: *Observations Upon the Protective Value of the Inspection of Public Women as Carried Out in Paris*. Medical Record, N. Y., 1904, vol. 65, pp. 651-652. Also H. A. Brann: *Social Prophylaxis and the Church*. Medical News, 1905, vol. 87, p. 74.

¹ To my mind the public pamphlet of the Indianapolis society, "Sexology vs. the Sexual Plague," is too grossly material and shocking. We must not admit "yellow" methods here.

and be ready with personal aid whenever its need is seen or felt and for the rest to trust nature.

H. G. Wells has even advocated a special law and censorship for all literature bearing upon this subject. H. Northcote¹ sees the higher aspect of this subject. I believe it is not now too much to say that a scientific knowledge of sex is absolutely necessary to understand certain fundamentals of Christianity and that the latter is to be greatly reinforced by the former. Our religion is at heart an expression of the passion for purity and righteousness and it will be indefinitely strengthened by every possible alliance with a true science of sex, and this in turn will shed a great deal of light upon practical matters. "The mighty idol Moloch, Lord of Baalim, before whom victims were plunged into the torture of fires, a sex deity in phallic worship, was a lurid symbol of the dangers that beset the sexual life." The sense of the inherent sinfulness of this relation has been explained in very different ways by Westermarck, Letourneau, Ellis, Crawley, Tennant, C. A. Smith, and others. It is due to the fact of long-continued and calamitous errors and excesses in this part of our nature to which the dumb instinct of the race that always says one thing while meaning another but is always inerrant when rightly interpreted, has reacted by developing the sense of shame. There is a marked trend in recent criticism both of the Old and New Testament to reveal sex meanings as often cardinal where they were formerly quite unsuspected, and even to judge of religions by the wisdom and effectiveness with which they regulate this relation. No topic is so hard to treat without exaggeration, pruriency, high colors. Northcote² deserves great credit for his sanity in treating perversions, sex in art, its spiritualization, marriage, divorce, disease, neo-Malthusianism, the battle for chastity in the child and the adult in a religious sense. Most current methods of coping with the evils of sex seem to him as effective as to try to suppress a volcano by carting off some of its scoria. Legislation has hitherto been usually baffled even in its efforts, to protect children. Hypnotism is not effective. Medical warnings, moral counsel and penalties may and no doubt do help

¹ Christianity and Sex Problems. Davis, Philadelphia, 1906, 257 p.

this evil that threatens civilization, but religion, which has been the chief agent in regulating it in the past, must be also looked to in the future. With girls even more than with men, it is important to connect sex enlightenment with religion. The deeper criticism penetrates into the inmost core of early Christianity and comes to understand the conscious or unconscious psychic motives that actuated it, the more it is seen that aspirations for righteousness on the one hand and the loathing of iniquity and sin on the other had their real meaning in ancient times and can be truly understood to-day only as reactions from the morbid, gross and excessive sexuality that characterized the declining age of Rome, and the new aspirations for purity in this respect which made chastity one of the supreme virtues and created the celibate sects, and that made virginity the most adorable of all things.

One of the most important factors in the problem of woman is how her *periodicity* has been regarded. Man has regarded her course as a badge of inferiority. He has turned from her, isolated her, called her unclean, thinking her for a time diseased and perhaps even infectious and sometimes enforcing fantastic regimen and taboos. She must withdraw, hide and feel humiliated. He did not understand that this was nature's inflorescence and not only marvelous and past his comprehension but essentially most interesting and beautiful, a process when normal to be proud and not ashamed of. The subjection of woman in so small measure consists in the fact that she has accepted this old ignorant view of her state and function from man. It will be a momentous step in her real inner emancipation when she fully realizes in her own soul, of course without ostentation, that this function is due to superfluity and not to defect of vitality, that it is the germ of a new life knocking at a door not yet ready to admit it or rather it is a mimic rehearsal of the whole birth and death. The first results of this knowledge and its complete realization will be that woman will accept and crave the whole of periodicity instead of maintaining her anxious concealment or repression of its symptoms and will regulate all her regimen and environment conformably to its norms. Young pubescent girls especially need to yield to nature with entire freedom, if not abandon. They often flush, turn pale, have moments of

confusion, yield perhaps to tears, certainly to inertia, are confused and uncertain. If boys are present, the old instinct of concealment makes them tense and yet more anxious, for were their state to be in the least suspected they would be utterly crushed with mortification. The result is that just those nerry girls who can least afford this strain, are most resolute that every day and all its duties shall be precisely like all others. Seasoned lady teachers have made light of it or taught that all the peculiar feelings of this state should be neglected as if a crude mind-cure might also obliterate them and it is thus so often with aching back or head, tired eyes, brains and muscles, girls try to be imperturbed and uniform through the entire month and thus grow exhausted and perhaps anemic, keep on in class although by doing so they arrest mammary and pelvic development and invite brain fag, which is only the foretaste of the later fag of pelvic and anabolic function which will appear in much more formidable form later in pregnancy and lactation. If girls' daily school associations were only with girls, they would be understood, would take more advantage of the allowance of cuts and other exemptions. Every fully developed normal woman wishes to be alone and a law to herself at times in a way that even husbands do not always understand. To ripen into the full maturity of perfect womanhood in the teens, in the daily companionship and competition of boys in class, hour by hour, weeks and months is difficult, rare, if not indeed entirely impossible. A haunting sense that the other sex must never suspect whatever betides, the constant effort a few days each month to conceal, the brutal gibes of callow schoolboys who often do suspect and remember and even note recurring absences, errors, bad lessons, etc., makes an atmosphere to which no girl should be exposed, and many who have been through it all, if not robbed of a little refinement and delicacy of sentiment, are more or less maimed in some of the manifold and early arrested or perverted last subtle stages of finished womanhood. Remarkable, indeed, if any such there be, who go through all these long and intricate processes of transformation under the eyes of our precocious American schoolboys unscathed, for it is one of the most trying ordeals which womanhood has ever been called to face in all her history. The entire history and tradition of her sex

from savagery up points to segregation with periods of isolation from prying male eyes. That the strain is real and great in cases where it is unconscious is apparent from the fact that the system of adolescent girls is drawn upon for years in order to develop all the organs and functions involved in reproduction which are many times larger, harder, and more uncertain, and require thus a far greater proportion of the total energy of the body than the corresponding parts and functions in the male. Not only sympathetic and spinal nerves but much more brain power and attention is absorbed by pelvic functions than is the case with man. Hence, if those who now argue that all kinds of mental stimulus tend to lower nutritive activities more in women than in men are right, it follows that the merely intellectual in them should be held back rather than incessantly prodded on as is done in co-education. Nature decrees that woman during all her fertile years shall be ever ready and recurrently begin to digest and deplete her blood and nerves for two. She can and must never during all her best years make it impossible for the very best that is in her metabolism, feelings, interest, will, thought, and life to be turned aside to the long and absorbing processes of gestation and nursing. Therefore, all other interests and every intellectual pursuit unrelated to these functions must of necessity for her be more or less provisional, for all not directly pertaining to motherhood may be suspended and superseded, for maternity means physiologically vastly more than fatherhood and can never be so incidental. Nature demands that woman be always ready to discharge this great function and this should be the first law of her being, and mental training in other directions is forever secondary. It depletes the system, makes these processes less vigorous and complete and when it does so works incalculable harm and loss.

From this view we can see how merely mental acquisition may be very falsetto and unreal. Learning has many stages. Knowledge may be crammed in the memory and held ready to be reproduced verbally when called upon. In this stage it causes effort and requires both conscious and unconscious strain. There is often worry lest it be not kept ever ready at call, and this anxiety prolonged after academic months and years, consumes much energy. All learning which remains in

this surface stage is a burden to carry, costly, manifest and showy though it be. Even if it is mechanized in rote it adds little or nothing to the power of life. Very different is the case of acquisitions that sink deeper and reconstruct conduct and make habits of life and become not merely *Kenner*, but *Können*. This practical knowledge is no longer luggage to be carried but is transmuted into strength that carries, is no longer something apperceived but a part of the apperception organ. It often ceases to be conscious and examinable but sinks deep and regulates and reinforces the springs of action. Its training and power is not merely noetic. Such is what we put to work and use and such studies have zest and vitality, are contentful and not merely formal.

Now girls tolerate and adjust to the former kind and stage of knowledge more readily than boys and, perhaps more than they know, their school curriculum remains unapplied. What they learn is farther from the things they most need to know and be and care most for. Their conscientiousness forbids revolt and their conventionality makes for complaisance, but because it is less vital it involves more nerve straining. It is not assimilated and so consumes instead of giving vigor. Thus till we demolish the inveterate conventionality of girls that makes them ready to accept what occupies only a secondary place in their interest so that they will turn as honestly from what they do not care for as boys do, school is liable to play havoc with both their nerves and their physical development and even their intellect and health. They will go on with their propensity to altruism, taking out from their system more than it can afford to lose. Instead of fitting primarily for self-support and trusting marriage and maternity if they come to take care of themselves, we should reverse this principle, and in addition to physical dimorphism each sex will be distinguished psychologically more and more from the other.

Self-abuse and Its Pedagogy.—Hard as it is to collect reliable statistics upon this subject, this has been done by methods that seem trustworthy. These and other considerations together seem to show that masturbation is very common among boys and young men and that very few vigorous and eager-minded youths have not at least at some time experimented with themselves in this way. Physicians have insisted over

and over again that no healthy male reaches the age of maturity without at least lapses into this habit. Often, if the extent of the evil has not been overestimated, its deleterious effects undoubtedly have been. It injures body and mind, however, perhaps less so than has often been represented. In certain definite respects it is worse than natural indulgence, viz., first, it can be resorted to at any time and does not require the presence of another person; second, there is no repressive influence of expense; and third, it distinctly tends to isolate and divorce the function from related processes that always should go with it, such as the normal preliminaries of courtship or even capture, gradual approach, showing off, and the general arousalment of the entire psychophysis organism. There is a close bond between this habit and degeneracy, each increasing the other. It undoubtedly makes directly for arrest before complete maturity. It gravely injures self-respect, brings a feeling of worthlessness, weakness, and *malaise*. It is incompatible with athleticism and all forms of keen, eager mentality or even artistic power. One of its worst results is that at a certain point the mechanism becomes automatic in nocturnal and spontaneous emissions, so that the system is drained of its vitality and this directly tends to bring a sense of repression and even despair that sometimes results in suicide. I have often had to act as father-confessor to students who had resorted to many kinds of devices, had been the victims of extortionate quacks, but all in vain, and had come to feel themselves lost forever, body and soul. Here alone in human experience all the litany of total depravity and of the unpardonable sin seems to be literally true. The young man in this state feels himself helpless in the grasp of a higher malignant power. It is idle to discuss what proportion of these dire results is due to psychic causes like fear and to physiological effects. It is a very salient, painful and yet significant fact that the fear of being incapacitated for future parenthood is one of the very most poignant of all the *psychalgias* to which youth is subject. Many indulge in the habit for a season and have strength of will enough to break off; while others always resolve with all their might in the trough of the wave of tension, and while at its crest all their good resolutions are swept away like foam. All this has brought these experiences into

very close relations with certain types of religiosity of which they are the key. Often the obsessions that rest upon the victims of this vice are so persistent that after hours of assertion, argumentation, encouragement, and an array of authorities, very little impression is made toward lightening the sense of impending doom; and it is sometimes very hard, and occasionally impossible, to restore their lost manhood, courage, and buoyancy to these youth.

Here it is that the results of ignorance are most disastrous. The statement of the simple fact that all healthy men occasionally have nocturnal experiences and that these are about as inseparable from the male as her periodicity is from the woman has often of itself brought great relief and spoken peace to poor creatures who did not know it. Here, if vice has slain its thousands, fear has slain its ten thousands; and sometimes these most blighting fears are found to be happily without any reasonable basis—the youth were normal but did not know this simple law of their being.

Nocturnal experiences have their own very interesting law. L. Gualino¹ thinks erotic dreams and emission, which explain many legends of *incubi* and *succuba*, are the surest sign of puberty. Like Marro, he obtained data from one hundred males as follows:

Age.	PER CENTS.	
	Marro	Gualino.
12.....		7%
13.....	24%	33%
14.....	48%	59%
15.....	65%	84%
16.....	86%	97%
17.....	92%	100%
18.....	100%

Thus, by the age of seventeen or eighteen, it appears that practically all Italians have had such dreams. These figures correspond in a general way to Marro's test of puberty by the growth of hair. The first seminal pollutions are vesicular

¹ Il Sogno erotico nell' Uomo normale. Rivista di Psicologia, etc., 1907, vol. 3, pp. 47-63.

EDUCATIONAL PROBLEMS

secretions without spermatozoa, and twenty-seven per cent are preceded by perhaps violent tumescence and vague feelings of tenderness toward the other sex, as noted by Wundt, Forel, etc. No personal sex experience is necessary to awaken these dreams. It may thus often be purely atavistic, and the new-born instincts with their brain centers and peripheral organs,* function spontaneously while the feelings, which have before been vague and not understood, become suddenly conscious, definite, and objective. As to the content of these dreams, the images from various senses of women are common; while to seventy-one per cent, they were ugly or even monstrous, perhaps a mother, an animal, etc. These images often transform themselves to inanimate things—a hat, a boat, a musical instrument, etc. At first, the act is often public, though usually uninduced by others, and in seventy-three per cent is rapid and violent. The emotional state is anxious, fearsome, desirous, etc., but with age the imagined female becomes less hateful, though she is still rarely known, and the phenomena of exhaustion and reaction are less marked. If such experiences are frequent, the psychophysis tension is less, the preliminaries to the consummation are prolonged, the place becomes more fit, etc. Erotic dreams tend to assimilate themselves to waking states, and in that respect are different from other dreams. The former are far more frequent, intense, and more recallable than other varieties of dreams. There is often a periodicity in them which usually disappears after marriage. They are accompanied by caresses and by excitement with restraint, but are also increased as by a kind of momentum in the post-coital period. They may occur in cases of psychic, but not of physiological, impotence. Gualino confirms the conclusions of the important studies of Sanctis and Maury that the habit of waking up and immediately recording dreams modifies their content.

That normal, virtuous, unmarried *young men have sexual periodicity* can no longer be doubted. It is seen in various studies of savages, in careful observations of dream and other nocturnal experiences, in certain psychic alterative types of mental alienation, and from our own collection of data from normal subjects. The form and frequency of this curve is subject to great individual variations, and it is superposed

upon a larger seasonal curve. So far as we are able to infer from these premises, the following seems to be a typical normal cycle:

1. The youth feels a subtle and languid sadness and sense of inadequacy stealing over him. He may or may not connect this with specific instances of failure or disappointment. There is so much to do and such heights to attain that his effort seems vain or at least inadequate; what he could and ought to strive for seems beyond his powers; wishes and ideals take on a rather definite shape, but his ambitions are unrealizable; some are more, some less, depressed; but life is felt to be too much or too hard for them; a few weaklings seem to lack the power to react, and break away from the normal rhythm and pass over to chronic despair and possibly suicide, or at least thoughts of it, which who has not had? For many success hardly seems worth the cost; the intellect is clear but the will is weak; more commonly this is a rather exquisite and sweet melancholia that is rather toyed with than taken very seriously; it may be keenly felt in secret, or it may seem far greater than it is by a kind of half-conscious affectation which loves to flirt with pessimistic moods; it may be a touch, but not much, of the Hamlet psychosis; it may be restless or quiet and contemplative; it inclines some to meditation and to solitude; it often seems like an ebb of the vital tide.

2. Slowly, usually in a few days, courage rises and a mood to do and dare supervenes; work is easier and activity is more effective; things are attempted with resolution and we accomplish things, mental or physical, that had seemed impossible; new, high purposes are formed and steps taken toward their execution; there is augmented motor tension; sleep is a little less; appetite keener; hardship and exposure become more attractive and difficulties fade. In some the unrest is liable to become fever; if there is anxiety, it is a spur and not a deterrent; second breath and brain erethism are more liable and the higher powers of man seem attainable; the pace of labor is rapid and fatigue may be almost forgotten; the spirits are aggressive, perhaps almost defiant; the disposition of Longfellow's "Excelsior" is on; the pulse beats higher, life throbs, and the soul is dauntless; very likely blood pressure is increased and metabolism more rapid; the tide is rising toward

its flood; the lover is no longer disheartened but confident and hopeful and harder to be put off. This is the efficient stage in which man does his most and best. In unbalanced natures the excitement may take on maniacal features.

3. After a time, more or less extended, of this reinforcement and acceleration, there comes a spontaneous, sexual, nocturnal crisis, usually with ecstatic dreams of the general type which punctuates all the virile life of man. The first of these experiences often marks something of an epoch in the private, secret life of the soul, exciting curiosity and giving a profound sense of exquisite realization and implanting a sense that there is something of inconceivable worth and value in the world, giving a glimpse of transcendent altitudes and possibilities of satisfaction of all man's longing and desires somewhere, somehow.

4. Now come normally a few days of calm, poise, tranquillity, and satisfaction; intensity of effort remits a little. It is good to be as well as to do; nature, art, literature, music, work on us with a slightly more potent charm; the demon of rush and hurry relaxes his hold; life is long and must be enjoyed as we forge and toil on; there is after all much time ahead, and we need not hurry so; much can and will be done, but not everything by us; when we think of our limitations we are more easily reconciled to them; there are other days to come and much must be left for others to do; sleep is at its very best and rest as well as endeavor is also sweet; we are now sanest, most philosophical, not easily perturbed, are judicial and can see and weigh two sides. But this stage, like the others, will not last and slowly begins again an exquisite ennui that soon clouds into some of the hues of discontent and longing, nameless though its object be. Content is not so complete but something is wanting, though we cannot tell what; but slowly desires grow definite. They are in pure natures not so sensuous as spiritual; ambition for achievement looms up in ideals and day dreams which go far beyond our ability; so that now again we are at the beginning of the first stage of the cycle from which we set out.

Thus the impulse of virility beats, and the momentum of heredity advances, pauses, and intermits. Through all the years of probation before marriage, we receive waves of

energy from nature which we are to sublimate and convert into ever higher cultural advances. Thus we ripen by control for effective fatherhood, when its consummate hour comes. These phases are very faint in many, are obscured by manifold outer influences, and often escape self-observation and that of our friends. Every kind of dissoluteness interferes with and denormalizes them. They are accelerated and overstressed in some; others are slowly arrested in some one phase, which grows habitual and may become a diathesis or give to character a permanent disposition. The changing gamut of moods is essential for full maturity, for it prevents stagnation and arrest, and makes the soul plastic and docile to every influence of development. Each phase has its own mental horizon and emotional experience, and thus the scope of the intellect, the range of association, the variety of feeling, is widened. Thus normal fatherhood ripens through its increasingly long novitiate in modern times, which was never so trying but never charged with such high potencies for complete maturity of body and soul. Individuation thus does its complete work and brings ripeness for genesis, in some sense its counterpart and antithesis. Now is the time for marriage for the turn of posterity has come. It is those who stand this long test successfully—and only those—that deserve and win in fullest measure the deep and abiding love of their mate, and merit all the respect and gratitude that children should owe to their parents. Failure in this stage means abated mutual love between parents themselves and between children and parents. No amount of personal kindness, wealth, exemption from toil, display, or social opportunities which husbands can provide their wives, can atone for the results of failure on their part in standing this severe initiation which modern life requires. To love is not to give gifts, neither is to receive them to be loved; but both are cheap substitutes and palliatives. So, too, no care lavished upon infancy, childhood, and youth by fathers who seek by so doing to atone for not endowing their offspring with the maximum of the most ancient and precious form of wealth and worth, heredity, can make atonement. Those who fail in this preconceptional stage also forfeit thereby the chief claim of parents to the reverence, affection, and obedience of their children. The bitter and justifiable curses of the latter

upon the fathers that begat them, which we see with increasing frequency in the world about us and in literary portrayals, are the most bitter of all invectives and the most soul-quaking of all imprecations.

Blessings brighten as they take their flight, and along with race suicide we already see signs of a new idealization of motherhood which sometimes takes the form of almost rhapsodical extravagance. "The true divinity of our day," says a German writer, "is the mother." God in the future is to be yet more our mother than our Father in Heaven, and even Protestantism must evolve some kind of a new Mariolatry of its own for the new coronation of motherhood.

Careful alumni statistics from Harvard and Yale show that 250 years ago only two per cent of the graduates remained unmarried, while now nearly one fourth are unmarried at the age of forty-five. Most of the women our forefathers wedded were barely twenty-one. Sibley and Dexter show that the average number of children of Harvard and Yale graduates was nearly seven per husband and five per mother. Half were clergymen who married in the early twenties upon ordination, and with a salary of from two to five hundred dollars, and our foremothers have spun, woven, knit, baked, washed, ironed, embroidered, made butter and cheese. No wonder their mortality was great. Of the wives of 418 Yale graduates before 1745, thirty-three died at twenty-five or under, fifty-five at thirty-five or under, and fifty-nine at forty-five or under. Forty per cent died before they were fifty, leaving on an average four and a half children each. If the wife died, the father must marry again to have aid in rearing his family, and it sometimes took a second and even a third wife to bring up the children of the first, to which number she often added her own. Remarriage was almost universal and was almost regarded as a religious obligation. No wonder these women often suffered from long and painful diseases, with medical aid sparse and incompetent, with thin shoes and the tight lacing common in those days. The fact that in the exercise of the holy office of motherhood she often had to face the grim chance of death under these hard conditions, tended to reinforce her natural religious instincts and to keep her close to the Divine Source of strength. While in Puritan days, men

quarreled about theology and formulated creeds and built churches, piety true and undefiled found its sanctuary in the inmost heart of woman. The unfathomable sense of dependence in which religion has its psychic root is strong in her soul, which has always been cramped and repressed, subject to pathetic disappointments, and this inclines her to seek religious consolation and communion. Where else could she turn save to God, where else hope for reward save in Heaven, where else feel at home and at rest from incessant care save in the church? The transcendental world is always inversely as this, and it is no small meed of praise for our Puritan mothers that they learned how to extract the comforts of true religion from the crabbed creeds and long doctrinal sermons of their day. One of the most widely read booklets bore the significant title, "Crumbs of Comfort for Mothers," and in a collection of old Bibles and hymn books I find many a favorite page tear-stained, and still more underscored and written through with cross references, in some woman's hand. In the lives of some clergymen of that day, we find, too, that he was sustained, guided in his choice and perhaps even in his treatment of his subjects, and had his courage reinforced, by some high-minded woman of his flock. These foremothers often kept school at home every evening. They left not a few journals and diaries. The New England Primer was a family book. The girls were taught to weave, spin both wool and flax, to make palm-leaf hats, embroider, quilt, dip candles, and were told of the medicinal purposes of a score or two of plants. Some of them educated themselves far beyond the school. Altogether, therefore, the Puritan New England mother, so far as we can form an adequate image of what she was and did, was a majestic as well as a pathetic figure. Now, no social class is so sterile as the educated who should send forth the best they breed.

Of all the indirect means of controlling and normalizing sex, first, the ideals of *physical perfection, training, body keeping, health*, lead. A young man with a ruddy cheek, clear eye, confident, erect carriage, fond of exercise, outdoors and afield, delighting in competition involving victory and fatigue, ambitious to be a splendid animal, with a strong, flexible voice, a natural piety, regular sleeping habits, hearty, free, open in

manners, in love with the good old *Turners'* ideas, *frisch, frei, fröhlich, fromm*, with a laudable passion to excel, with a love of rhythmic movements of great variety and vigor which may count so much to cadence the soul to virtue and preform it to religion—about such a young man there is usually nothing that is wrong in secret. It is these things in which those who are sexually unhealthy are crippled, and into this joy of life those who know much of Venusberg can never enter. Thus every introduction of a motor element in place of the old sedentary training makes for chastity.

Second, the *intelligence* of young people is normally very keen, their curiosity alert, their minds sprouting and teeming with eager spontaneous interest, grasping out for new facts, trying new-found powers of reason, ambitious for all kinds of summits like the hero of Longfellow's "Excelsior," having spells of amazingly rapid growth, crises of perseverance and activity, when now the soul, now the body, shoot ahead by leaps and bounds, the former in a rapid, intuitive way possible only for youth. Now every intellectual interest is also a sedative or an alternative of sex on its sensuous side. From this follows a converse truth of the gravest import, viz., merely formal school topics, dull teaching, listless routine, zestless attention, are themselves incentives to passion, which always presses for entrance into unoccupied minds and moments, so that wherever there are unused functions, there is danger. Sitting without mental interest invites the devil. On the other hand, for the virtuous the deeds and words of great men are never so inspiring, while the dry-as-dust teachers and courses are co-respondents with the lusty blood of youth in the indictment of sexual errors now brought against high-school pupils and college students. It is a hard thing to arouse strong and deep intellectual interests in young men at this age, and it is because of the dangers where this is not done that we must base one of the strongest arguments for making education more industrial, occupational, or vocational.

Third, puberty is the birthday of the *feelings and emotions*, which are the oldest and most dominant parts of the soul, that really rule our lives even, and have most to do in making us sane or insane. Let me repeat that the young must tingle and crepitate with sentiment, and feeling is at no time quite so

necessary as during the teens. If there are no worthy excitants or causes, the young are very liable to turn to grosser forms of pleasure; hence every glow of even athletic interest, every thrill aroused by heroism, every faint pulse of religious admiration, takes just so much from the potential energy of passion by giving it a kinetic equivalent on a higher plane. One of the surest effects of overindulgence of passion, on the other hand, is that the heart grows stale, there is abatement of the lust of life, a touch of cynicism, indifference, a dampening of the faculty of admiration, a feeling that there is after all hardly anything in the world really worth heroic endeavor or self-denial, a *nil admirare* pose toward great questions and interests, a touch of incapacity for genuine enthusiasm, and in place of heartiness and high *Gemüt* and *esprit* there slowly supervenes some form of fastidiousness, which is always a bad sign. The young man coddles and nurses his body or his whims, develops affectations and perhaps idiosyncrasies, may become overfinicky in dress or even cleanliness, for there is such a thing as overimmaculateness in these respects. Such things even in collegians are often the first harbingers of the slight, faint symptoms of *dementia præcox*, which in so many cases are found among those who have freaky, faddish veins of excellence and perhaps pass for geniuses that have just failed to arrive. In most bachelor clubs we find such types. The world is full of laggards who have not quite attained full maturity or virility, who are not mattoids, rowdies, vagabonds, dullards, hoodlums, or young leaguers but nevertheless have not finished their adolescence but have been checked. They have had enthusiasms but perhaps these have been suddenly lost. There have been great promises but they have been dropped into humble situations. Only an expert alienist would detect the germs of dementia, which have never fully developed. Adolescence is a thing of many stages and arrest is liable at any one of them. Some parts may be disproportionately developed because cohesion and psychic unity are not attained. The world is thus full of those who have stopped at every stage of this toilsome, devious and complex way upward, who have disappointed their friends, grown *blasé*. Some of them doubtless are found among the 269 Prussian students who between the years of 1885 and 1889 committed

suicide. They may not have overt symptoms and lack all the paradigms of premature decay, but they have not fully matured or they have matured prematurely.

As to late marriages, long ago Galton showed that even in fertile England, if women did not marry before twenty-seven or eight, the nation would die out because there are not enough children born of mothers over this age to keep up the population. In this country, had we sufficient statistics, this age would doubtless be found to be lower, for as fertility declines in any class, marriage must be progressively earlier in order to insure that each generation be as numerous as that which preceded it, while it must be yet earlier if population is to increase. Tested either by the number and frequency or by the viability of offspring, the early or middle twenties are the golden age for effective motherhood. Special studies seem to indicate that if either parent is over the age of maximal efficiency in fecundity, the interests of posterity require that the other parent should be a little under age, so that for a number of years the total age of both parents should not be much above sixty to maintain the highest rate. Some think that those born of too young parents are prone to attain the completest maturity, and it is probably more certain that children of too old parents tend to mature precociously and perhaps to show early signs of caducity. Again, the late maturing classes produce but about three generations per century so that their offspring, even if as numerous, would eventually be snowed under by that of classes that produce four generations per century. Within marriage the "one-child" system, or even the "two-child" system is condemned and found wanting because only children are, on the average, distinctly inferior to those with several brothers and sisters. It is therefore pathetic to find so many parents, especially mothers who are rather delicate, who strive by lavishing excessive care upon their one or two rather feeble offspring to atone for the faults of nature by nurture. Only the complete mother is the complete woman and the complete father the complete man. Tertullian said, "The soul is restless till it finds rest in God"; so the soul of woman is restless till it finds the fulfillment of its deepest desires in motherhood. Is there anywhere a normal woman of thirty-five or forty, famous though she be, who

would not in her heart prefer home, husband, and children above all things the world has offered? The wife enters, but only the mother graduates from the great college of life. Nature has no more magnificent processional than the gradual blossoming of wifely into motherly love. Without this womanhood is unfinished. Compared with this, culture, society, charities, suffrage, occupations, rights, are only consolation prizes or at least secondary and more or less diversionary choices, sought often all the more eagerly because of a hungry void in the heart. For those denied the supreme goal of womanhood it is well that these placebos and nepenthees are at hand. The deepest instinct, therefore, of every true woman soul is to transmit life, and her profoundest and most inconsolable woe is the prospect of a childless old age and death. Her soul is more protensive than man's and the desire for personal immortality and that for posterity sustain and vicariate for each other, all of which, of course, is in changed terms and proportions also for men.

On the other hand, there are women that seem made rather for gratification than for procreation. They are not built for motherhood. Their figures are those of the fashion plates, and such could not bear, nurse, or rear healthy children. They long for adoration and conquest; their whole character and conduct is adapted to win rather than to hold man's affection. If they marry, they drop at once all the artifice which has constituted most of their lives; and to their husbands at least they appear in their true nature. They often crave and demand about every indulgence and service. Their accomplishments do not include home-making; perhaps they palpitate with a sense of their rights but of their duties they know and feel nothing; responsibility irks them. Their love for their husbands does not persist like that of Perdita's in wanting them to be the fathers of their children; but to some of them the mere idea of childbearing becomes almost a morbid phobia. Their part in the partnership of wedlock is at most to hold and advance their own and their husband's social position. If they are vital enough to love physically, it is for self pleasure and not for posterity; and they usually know the theory and practice of the neo-Malthusianism of prevention. The husband of such a woman is at best the privileged lover rather than her ideal of a father. She may, if fervid, illustrate Kipling's Vampire and sap the vitality of her spouse and bring him to premature senescence; or, if she be or grow frigid, he must be content if he can admire her taste in dress, her social successes, the brilliancy of her intellect, perhaps her delicacy, exquisite nervous sensibility, or any other of these wretched substitutes which women of this type

offer their spouses in place of true wifely love with plenty of maternalism in it. Again, her fancy may be of the roaming rather than of the homing type, and she may delight in fascinating other men, which such women who have so little to offer often know superbly well how to do, and leave her mate to either grow indifferent and to follow her example or, if the poor wretch really loves her, to eat his heart out with jealousy and fall a victim in the end to scandal and the lawyers.

The problem is how and why such types exist in civilized society when they are hardly found among primitive races. The question is as interesting intellectually as it is sad. Are they themselves products of decadent love, and has man thus, by some law of nature not yet fathomed, tended to provide his own sex with women who are meant for passion and not fit to be wives and mothers? Because man indulges himself more than is needful for offspring, does the great Biologos provide him with these specimens of the other sex as the *cloaca* of his superfluous passion, making them sterile in the interests of the race? Surely prostitution is not inherent in the economy of nature; or does she cunningly fashion this type to attract men of her own class who want only gratification and are not fit to contribute to the constitution of posterity? This latter seems the most optimistic because the most eugenic view. Growth studies suggest that such women may be products of arrest, since height and slenderness come first, and breadth of head, chest, and hips, which is the physical basis of maternity, are added later. If so, it is well that this type are sterile because, lacking maternity themselves, they could not bear children that would come to the full ripeness of man's estate. Whatever their origin, the tragedy is not when they mate with their kind, but with those whose supreme desire is to be fathers and found families. This type, at any rate, should be known as it really is, and their diagnosis should be a part of the education that fits young men for marriage.

It is very hard for a mother to be rich, especially to become suddenly rich, and to be a good mother. In no age or land is this shown on so vast a scale as now and in this country. Great prosperity is dangerous and hard for women, perhaps even more so than for men. Through long ages of past subjection women have been bearing burdens and often bad treatment, while now those of the well-to-do classes have fewer duties that must be done and more leisure, are more exempted from the burdens of life, more waited on by servants, flattered and pampered by men, better dressed, more given over to amusement, show, and pleasure than ever before in the world's history. The number of such women is unprecedentedly large and is increasing. Treated as dolls, some become so, or as idols they become arrogant, exacting, and above all their natural altruism is turned into a selfishness that is rank and almost inconceivably extreme. From bearing their full share of the burdens of life, a few generations ago, they are now living one con-

tinuous round of pleasure. Their husbands toil that they may be lilies of the field, are proud of their beauty, adorn them with costly ornaments, surround them with every luxury, vying with each other that their wives and daughters may outshine, outentertain, outclass those of others in extravagance and display. It is now a hard doctrine but a true one that all women need work, pain, suffering, no whit less than men and perhaps more so. They need more or less hardship to bring out their best qualities. These haughty queenlets who appear like fashion plates, who dictate, demand and command cannot possibly be good wives, still less good mothers. Never have such large numbers of their sex made such heavy demands upon men. The man who declared that if he could choose his heavenly lot it would be to be born an American woman of this class, let us hope for his own sake was sincere and not a humorist.

We must realize that for all our boys and girls to-day the old ideals of absolute purity in thought, word, and deed are impossible, and that prudery and reticence are co-respondents with temptation for many a lapse from virtue, although I think we must on the whole consider that the youth and ignorance of girls are even less dangerous than are industrial conditions that force so many thousands of them in the later teens to work for from three to six dollars per week, supporting themselves where the standard of comfort is so high and in an age when the instinct to display is so strong. Incidentally, too, we should not forget that deep down in the soul of every man and woman lies an inveterate tendency to condemn in others thoughts which they themselves have struggled against, and that there is no obloquy that we tend to mete out to others that is quite so great as that with which we would visit the faults we are always fighting against in ourselves and no delusion greater than that by severe judgments of others we tend to establish ourselves more firmly in virtue. This is far deeper than hypocrisy, although the latter, of course, exists in those who ostentatiously condemn their own secret vices in others.

There can be no doubt that most young men, even in college, but especially years before, commit errors and suffer grave dangers from ignorance. Some have thought that between the ages of fifteen and twenty sexual errors are the cause of more illness and pain than all other diseases combined. It is hard for the young to realize that the first pur-

pose of sex is procreation and not pleasure, that sex is a creative function, that youth cannot become mature unless the glands continue internal secretions which must not be interfered with by those that are external. Sex is a great quickener of mind, intelligence and especially of the imagination and the higher sentiments. If there is excess or defect, it is self-respect, will, mind power that suffer. The individual tends to become solitary rather than social. His individuality is not completed because general nutrition is interfered with. Boys abnormal in sex are generally either nervous and restless or dull and always unable to do continuous, hard mental work. Thus the sex organs have two functions: the first is reproduction and the other is to give force and energy to all other parts and to character generally. All work involving great effort, either mental or physical, requires sexual temperance, and Delilah always robs Samson of his strength. Again, many young people do not know that occasional, spontaneous emissions are normal and necessary for young men. The only danger is excess. Sex is generally dormant as such up to puberty and should not be too strong during the earlier teens. It is, however, an appetite that simply has to be controlled. Some of the very worst falsehoods are commonly believed. The most unfortunate of these is the notion that exercise of this function is a physical necessity or preserves virility. Both these propositions are utterly false. It is precisely as physiological to speak of exercising the lachrymal, mammary, or other glands to keep them from atrophy. The latter is caused by excess, especially if it be premature. Dr. Morrow, in whose admirable little pamphlet these concise directions are given, tells us that he has high authority in the Catholic Church for stating that when a lay brother who has not taken vows leaves a monastery after a long practice of chastity and marries, such unions are generally very prolific. Another wretched error is that the ordinary principles of truth and morals do not apply in the sphere of sex, and that chastity is not natural for men and that nature will tolerate a wild-oats period. Facts show that it is not the most virile, vigorously sexed men that are most given to licentiousness but those who have been made weak and irritable by unnatural or excessive practices. Idiots are often most active of all sexually. As to the insistence that

one has a right to do as he pleases in this field, it can certainly be said that he has no right to injure others. Wedlock, with children, should enter into the life plan of every young man. He should know that nearly all lewd women are diseased and that medical statistics show that those that are youngest and most attractive are now usually most sure to be diseased. No circumspection, not even protectives, are effective safeguards against the dreadful taint of venereal disease, the main facts of which everyone should know, and especially that, in Dr. Morrow's phrase, "a leper would be infinitely less dangerous to others as a source of contagion than a syphilitic." He adds "the greatest criminal is he who poisons the germ cells, for he poisons life at its fountain head," and "gonorrhea and syphilis are the most potent factors in the depopulation and degeneration of the race." The former, once thought to be more or less harmless, is now known to be in women the source of most of the troubles of their sex.

Drink that intoxicates immensely increases sexual temptation. Forel estimates that 76.4 per cent of venereal contaminations are made under the influence of alcohol and that most of these occurred before the age of twenty-five. By far the greatest temptation of student life from the dawn of the high-school period through college and even through the university is found in this sphere; and the only possible way to meet it is by vigorous assertion of the will which, if it cannot control this impulse, is liable to be a cowed and beaten thing. Of course, control is of all degrees, but this is perhaps another chapter.

My own most radical belief is that we shall never entirely solve the complicated problem of sex education by any, or even by a combination of all, special methods mentioned above, although all of them doubtless have their place and do good. If sex is as fundamental and all-conditioning for human well-being as nearly all eminent experts now claim, it follows that it must be made correspondingly central in education in a way to unite its chief topics into an organic whole, that fits the successive stages of human development so as to utilize the intense and unique interest that now goes to waste. We must, in a word, make a special curriculum to this end and devise new courses and text-books. First, I would have *bofany*

drawn on in a series of texts graded to age, more or less apart from the more elaborate laboratory methods and stripped of technical terminology, setting forth the methods of plant fertilization, showing how the male and female parts differ, what blossoms and inflorescence mean, how the seed grows, and the provision of nature for its protection, fertilization, and nutrition, the whole wondrous story of insects and their rôle in plant life, how the winds and water and many cunning and clever devices bring the sex elements together, how plant species increase, decrease and die out, what man has done from the first domestication of cultivated plants down to Burbank and De Vries, etc. All the chief and salient facts from Darwin down to the present should be culled, ordered, popularized, and then this basal part of botany should be given as intensely humanistic and moral a character as possible without being direct enough so as to seem to the pupils to be shaped with that chief end in view. The world has never yet had a botanist who was also inspired by the true spirit of the pedagogue and of insight into the nature and needs of the child's soul. Thus, up to date, there is a sad void in our scheme of pubertal and prepubertal education which this topic is admirably calculated to fill. For boys, and still more for girls with their intense love for flowers, which means so much to them that man cannot fathom,¹ there is a unique opportunity to feed this natural appetite now so starved. This of course would not necessitate for all, instruction concerning herbs and trees from plant lore to forestry and gardening, and would appeal only incidentally to other interests than those that root in reproduction. The vitalizing personal touch comes only with the sweep of the great laws that make vegetation eloquent with lessons for human family life. That this touch is rarely given in our high-school courses of botany is a wasteful mistake.²

Secondly, the same should be done in *biology*, beginning with the lower forms of life. We have now a vast body of

¹ See *A Study of Children's Interest in Flowers*, by Alice Thayer. *Pedagogical Seminary*, June, 1905, vol. 12, pp. 107-140.

² In Prosper Mérimée's *L'Abbé Aubain*, the heroine, beginning to love the abbé, finds an old and dried bouquet and tries to induce him to tell her its history but at first in vain, so she prevails upon him to teach her botany. In this she says

facts concerning sex and reproduction in lowly, aquatic forms and still more in insect life—eggs, time, place, and manner of deposition, nests, home-builders, larvæ, their care and defense, and all the wondrous instincts that show the subordination of every item in the life of the individual to the vaster interests of the race some outline of which should be known by every boy and girl before and during the early teens, for this would prepare the way for broader and more harmonious insight into the essential mysteries of life, reproduction, disease and death. All this is really ethical and practical to the core, and is the vital breath and native air to the sex instinct in its period of *éclaircissement*, when it becomes dominant and needs intellectualization for its proper control and guidance. Then, too, there are all the lessons from the secondary sex qualities—antlers, ornaments, plumes, wattles, and the countless love antics and types of animal courtship together with the phenomena of sexual selection. All these prepare the soul for meeting the stresses of the age of sex metamorphosis and suggest what parenthood means in the order of nature. It is the facts of natural history rather than those revealed by the microscope (which latter should not, of course, be neglected) that are needed. Here, too, belong the struggle for survival, the great fecundity of some lower species and the elimination of the unfit, and the increasing prevalence of better and more adapted types of life. Evolution here is full of precious and yet unutilized lessons for virtue, and brings in the larger view, cures the myopia for time so common in the young that makes them blind for all the long-ranged forces that control human destiny. Here, too, belongs an outline of the lessons from domestication, how and by whom achieved and its effects. Some of the laws of animal breeding as seen in poultry, pigeons, horses, dogs, and domestic animals should have a place. Thus here again we need a series of texts up the grades by zoölogists

she made astonishing progress, "but I had no idea botany was so immoral, so hard for a priest to explain. Flowers, you know, my dear, marry just as we do, but most have many husbands. One set is called *phanogams*—if I have the barbarous name—which means they marry openly in the town hall; while the *cryptogams* marry secretly. It is all very shocking. At first I was so silly as to shout with laughter at the most delicate passages, but now I am getting cautious and ask no more questions."

who are also humanistically, ethically, and even religiously minded—a type of expert rare indeed to-day. Why does not some rich man, or, perhaps, better, woman (for she would be more likely to see and appreciate this need) offer a prize for such texts of a character which could now be prescribed by a syllabus or programme and which if generally introduced would not only mark an epoch in the field of sex instruction but would greatly raise the level of intelligence and increase the body of vital information possessed by all?

Thirdly, in the field of *man's* development we also need texts that should deal delicately, yet plainly, with the history of marriage and the family, not omitting the story of woman's social and domestic position up the culture stages, and treating also as systematically and economically as possible of a large variety of such topics as the care, treatment, and training of children, apart from the specific education of the school. There should be a brief outline of educational history, and the story of the home, much about parenthood, and the influences that tend to magnify or destroy its importance. In this domain, at least in the college grade, should come some treatment of both the culture history and the physical and pathological aspects of sex diseases and weaknesses that undermine races and nations, the causes of infertility, race suicide, the nature of adolescence and senescence, the age of nubility, the hygiene of wedlock, and I am inclined to think something rather specific concerning the virtues of fatherhood and motherhood before and after childbirth; and such a course should not omit mention of the social evil, white slave traffic, prostitution and its regulation, pornographic literature, art, and the laws and work of the societies for the suppression of obscenity and vice. Divorce should have a brief chapter and eugenics a longer one. There should also be something concerning the psychology of sex and love, together with its history in various ages and its meaning. An important chapter would deal with the relations between the various religions and sex, and another would show how the imagination and the feelings root in and irradiate from this part of our nature, and how inconceivably plastic the instinct is. There should also be some hint of its grosser forms, and how these often very repulsive factors may be sublimated and spiritualized into love of the good, the

beautiful, and the true, and transformed into ambition, achievement, creativeness, and the rest. Something should be taught concerning the forms of temptation and the modes of resisting it, and a little about the social treatment of girls who go wrong. Certain common errors concerning the reproductive function and its control need explicit refutation. No young man or maiden should graduate without some knowledge of the hot battle between virtue and vice that goes on in every individual soul and in every community. All this should be taught, of course to the sexes separately—more directly to young men, more indirectly and more affectively to young women—to the end that they be intelligently interested if not enlisted in the agencies of social welfare and informed of the work of all the chief societies that work in so many ways for purity and for posterity. Such a course might long-circuit the physical instinct and refine the soul and bring it into living *rapprochement* with the moral forces of the world, insure against personal error, and preform choices, bringing enlightenment into a field now festering with ignorance, error, and superstition. The texts needed here would of course also be of a new type that does not now exist.

Now, if we could have a society of all purity societies to organize the various medical, religious, and sociological endeavors leavened by the right admixture of biological, physiological, and psychological knowledge, such courses might well be set up as the goal of such an organization. It has not yet entered into the heart of man to conceive the amount of genuine scientific knowledge that a deep interest in sex could carry and vitalize. No other apperception organ has such power to learn or assimilate. The acquisition of knowledge which this zest could effect—and that naturally and without fatigue—is probably quite incredible. Thus the plea for such a new curriculum might rest its claims solely upon mental economy, and find here a new noetic faculty not yet brought into action in the educational field. In the higher pedagogy, the altar of this new muse will occupy a very central place. This kind of knowledge has little need of the methods of review and examination; but if taught aright, and in due sequence, richly set with illustrations, it would sink deep and at once, by what the scholastics called "first intention." This kind of knowledge

has no need of analysis or of methodization (save whether its items fit ages) or demonstration, but is apprehended as a whole. I am convinced that it would bring at once a great increase of intelligence into the world. We should be surprised to see how this new interest would not only augment acquisition in its own but irradiate into other fields. The knowledge thus acquired, too, would have a practical cast for any other sort of knowledge, because so near to the Platonic ideal that knowing is doing, for to know virtue is at least halfway to being virtuous.

To those inclined to object to the plainness of instruction advocated above, I would reply that the specific studies of the minds of childhood and youth show that they contain weltering masses of falsehoods, half truths, and errors, some of which are quite prone to bring moral and physical disaster, and that the budget of information that they actually possess contains indecencies unsuspected by parents or teachers, compared with which all outlined above is purity and chastity itself. More than this, the errors due to withholding truth cause incalculable waste of mental and nervous energy, bring distrust of the veracity of parents, false theories, worries, fears and uncertainties galore, clog and arrest the very intellect, muddle conscience, and mislead the will, disorient the feelings, and lay the foundations for many a neurosis and psychosis later, when plain information would disentangle anxious perplexities, remove deep and often unconscious worries and tensions, bring a great peace and normalization of soul and enable youth to face the world with new courage, hope, and resolution, to say nothing of causing marked reinforcement of health by removing neuroses and mental symptoms themselves, which are so prone to prevent the attainment of full maturity of body and soul. Of all the many needs of education, I have slowly come to believe something like this is the chief one. Like fire, sex is a wonderfully effective servant but the most disastrous of all agents if it becomes master.

To those who say we cannot work out such a course because there are no people who have the rare combination of scientific and ethical humanistic qualifications required, I reply that this difficulty is indeed grave. The pure scientist, who would follow the truth wherever it leads, is as impatient of the

demands of moralism as the artist who cultivates art for art's sake alone. Most physicians seem tied—some to be sure with longer, some with shorter tether—to their collection of horrid facts and figures concerning disease, and hence rely too much on the appeal to fear, knowing very little of the broad biological basis of sex and nothing of sex psychology, and with no adequate appreciation of the far harder but yet more effective prophylactics of enthusiasm for physical development or of zest in intellectual and religious things. Most puritists have zeal without sufficient knowledge. Thus none realize the full magnitude of the problem or the all-pervasive dominance of what is at root sexual; and hence all tend to emphasize their own partial ways and find it hard to rise to a higher synthesis of effort now needed. But, on the other hand, there is still force in the old dictum of Kant: that what we ought to do we can do; hence I am optimist enough to believe that a new co-operation of organizations and efforts will sooner or later bring both the realization of this need and methods of meeting it, even though this insight may come slowly and piecemeal. A long, hard, and joint effort alone can do what is necessary. For one, I am not without hope that in these days of the higher education of women, although colleges designed for them in this country now usually ignore all these questions and women's clubs taboo it, there will be found here, sooner or later, as in Germany already, women well trained in the biological, medical, and social sciences who will come forward to grapple with this theme, inspired by woman's greater sense of the social, moral, and religious forces involved, and help the western world to do this one thing needful. The situation surely ought to make a peculiar appeal to woman and her pedagogic instincts even if they are often somewhat atrophied, because she can be educated with less danger of being dwarfed by specialization. Thus again *das Ewig-Weibliche*, if it mean woman's more generic, intuitive, and conservative nature which makes her stand closer to the race and gives her greater interest in seeking to hold it true to its destiny, may here be our hope and may perform for us a new Diotima function. She certainly ought to be interested in the applications of the new psychology of sex to the new and higher criticism of literature that might at once have its place in girls' colleges +

for its purely scholastic as well as pragmatic value. Being established here, possibly these interests might irradiate into the more practical spheres of life. Perhaps if we could subject the suffragette mind to psycho-analysis, the instinct to be of more social and political influence might turn out to have a yet better expression in some such service.¹

For youth, sex pedagogy is too large and progressive a theme and the need is too great to limit it entirely to pupillary or even academic grades. There is much which, while it might be taught before, should at least and latest be known to all those of either sex fully nubile or contemplating wedlock. Into this field one might well hesitate to enter, because it is now chiefly divided between prudes and quacks and because science itself is not ripe to do justice to the subject, and still more because the limitations of one's personal knowledge and distrust of his own judgment are made almost painfully conscious. Let it be distinctly understood then that what follows is put forward only after much hesitation with a profound sense that it is only a tentative first effort to do two things: first, to popularize certain fundamental biological and physiological facts for pragmatic needs; and secondly, to bring a little more into the consciousness of those who need it what the psychology of fatherhood and motherhood, in a sense most vital to all who have experienced them, mean; but which has never to my knowledge before been set forth in print.

Not birth, but impregnation marks the beginning of life. For the psychologist, however, it arises still earlier in the mutual appetency of the mature ovum and sperm cell for each other which manifests itself in the soma as love. Of each of these, especially the sperm cell, the development history is very complex and still obscure. The life, growth, and all the activity of the male and female body and soul up to the age of full

¹ See *Schriften zur angewandten Seelenkunde*, edited by Sigmund Freud, especially *Der Wahn und die Träume* in W. Jensen's "Gradiva," by Sigmund Freud. Heller, Wien, 1907, 81 p. *Traum und Mythos*, von Karl Abraham. Deuticke, Leipzig, 1909, 74 p. *Der Mythos von der Geburt des Helden*, von Otto Rank. Deuticke, Leipzig, 1909, 93 p. *Wunscherfüllung und Symbolik im Märchen*, von F. Riklin. Heller, Wien, 1908, 96 p. See also *The Oedipus-Complex as an Explanation of Hamlet's Mystery: A Study in Motive*, by Ernest Jones. *Amer. Jour. of Psychol.*, Jan., 1910, vol. 21, pp. 72-113.

nubility has for biology as its supreme entelechy the production and ripening of these master cells. As they are the souls of the body, perhaps the chromosomes are their souls. These cells are the fruit, as adolescence is the blossom of the human plant. They are bearers of the immortal plasma which connects us by a direct continuum with the first anthropoid and back through it with the first amœboid form of life in the activities of which genetic psychology properly begins. There is a protoplasmic bridge, therefore, between the present and every preceding generation back to the dawn of life, every form of which perhaps converges backward to one cell or bit of protoplasm from which it all arose, so that all that lives belongs to one family. In the interests of germ plasma every other tissue and organ of the soma is developed from the simplest flagellum and tentacle up to the human body. In the lowest forms of life single cells grew large until they could no longer be nourished from without when they must either divide or die. They chose the former alternative. When the mother cell split up into two daughter cells there was no loss of matter or of energy, but new powers of growth and nutrition were set in action. These cells in time divided again and so on for countless generations. There was no rupture of continuity, nothing was sloughed off as a corpse. Each protozoan cell was essentially reproductive. A little higher up the scale of life this immortal and ever-dividing germ substance develops special organs to serve its purposes. These just in proportion as they are specialized lose reproductive power, that is, are subject to death. When a new organism bifurcates off from the old, these specialized tissues and organs are sloughed off, and thus as we go up the scale we can trace the development of the corpse and thus of death. Successive generations are only deciduous leaves, pulses, or nodes in the endless life of the plasma. Once there was no sex, but all its dimorphism was evolved to widen the range of useful variation and to give growth and momentum acceleration and thus to make for progress and also to cause reproduction to be more economical. Why the male and female cell which diverged from a lower differentiated type attract each other, no theory of tropism or hunger can explain. The soma is subject to old age, but even all its noneliminations cannot poison the

germ plasm which is the seat of memory just so surely as memory is continuity of vibrations.

In nearly all that pertains to the transmission of life, as so often in matters of less importance, consciousness says one thing but means something very different. Lovers think of their own happiness, but are really acting in the interests of the race. The intellect is largely a product of individual experience, but instincts, feelings, and impulses which are larger and deeper represent the species and are relatively blind. These now assume control and act *sub specie aeternitatis* for the race which is infinite and immortal. This unconscious nisus, not ourselves, that acts for posterity, is really the voice of another generation demanding to be born and well born. The plasm now dominates the mortal soma and all that goes with it, including conscious intellect. Thus, love serves the interests of a new individual and is only the annunciation that another life has begun to move toward incarnation. When two germ cells would fuse, all in the body and soul of the two adult organisms containing them is led willing captive and is impelled to conduct and thought that transcend selfish interests and do not fit or comport with those of the individual. The conduct and mood of normal lovers, however, is true to the unborn, to the future, and to the genus. Lovers are caught in a vortex and defy reason, custom, danger, and even death. This, poetry and romance rightly represent as the apparition of a higher power that can profoundly reconstruct the inner and outer life and convert selfishness to altruism. Blind as it is to knowledge and deaf to counsel and rebellious to outer constraint and reckless of personal advantage, it is, at its best and strongest, sagacious and loyal to the interests of the child that is to be. It is keen to appreciate beauty, but real beauty of form, feature, grace in man or woman is only the perfect expression of health and wholeness, and strength and gracefulness are ripeness, mental vigor, and charms are sanity; i. e., perfection of form means ability to bear and nourish offspring in women and strength in man means protection and power to provide. Perhaps Schopenhauer is right that each sex seeks rectification in the other in the interests of posterity. If so there must be some counterpart relation of complexion, temperament, size, and perfect love could arise only between highly individ-

ualized men and women each of whom essentially supplemented and corrected every deviation from the norm in exact proportion and in both body and soul, for then offspring would stand midway between both parents and would approximate the type in every particular. This would explain the constant inspection and examination of each sex by the other, the instant perception of mutual fitness that may occur and also the natural aversion of those whose peculiarities would by summation remove the offspring still farther from the norm or mean. Offspring are thus a part of the body, and love of offspring is part of self-love.

Inclination of two lives is, in Schopenhauer's phrase, the will to live of a new being. The desire to fuse is at root to realize the better synthesis of amphimixis. In love we have an apparition of the true nature of the species. The individual loves what he lacks. He would match his manhood with her womanhood and rectify their mutual deviation. There is some illusion needed. The individual is seeking his own aims but really accomplishing those of the race. Love is at the same time the acme of individuation and the apparition of the species in an individual life. It deals with the deeper forces before which human law is froth. Man's love often begins to decline when that of the woman begins to increase. To avoid salacity and venery, to keep it on the highest plane, to develop all its myrianomus forms of expression, to keep the Platonic ladder open, is perhaps the chief earthly aim.

In love there are endless plots and side plays. Creation sets the stage; nature is its scenery; the fading of its visions is its tragedy; experience is learning its stage technic. Earth was cold and pitiless till love came and gave all things meaning. We do not love in others what we hate in ourselves, but what we lack. Love means giving up one-sidedness. Osmosis, tropism and contraction give new interest even to touch, especially in *astus*, and perhaps cause vascular congestion. Courtship is sex selection and protoplasmic hunger. Only the imperfect love. Projecting self into posterity means lust of immortality. Preparation for parenthood should be long, detailed, little should be left to chance, and the priority of woman should be respected if all is to be immaculate. Fear of death and shame of sex go together. The focalization and *

obsession is progressive and by many stages and there is a subsequent long period of systematization. Each attracts all of the other sex and is attracted. From the stage of phallicism to the highest conception of God as love, is yet a long way to travel.

Each mature sex cell then tends to fuse and merge with one of the opposite sex and far down below consciousness each is drawn to and calls the other. The will of each to live is now solely the will to find the other, else both must die with all their complex, ancient, and slowly evolved potentialities. That most do so is really the primeval and supreme pathos of nature. Though unknown save to science, and so unwept, this preconjugal stage is one of vastly greater mortality than that of all the later stages of development combined. Every such cell that perishes is the extinction of an ancestral line that runs back to the beginning of life and one of the chief efforts of nature in evolving the higher orders of life is to economize this tragic waste of what has cost so much. The processes, minute as they are, by which these cells were evolved are more intricate, more vital, and probably took more time than all the subsequent stages by which the soma, i. e., the rest of the body of animals, was developed. If we only knew all the stages of evolution of germ plasm even as well as we do what follows the union of these cells, we should realize that the saddest and most wasteful fact in the world is that such a vast majority of them die unwed. In this fact the pessimism of the future will find its strongest basis. However slight the influence of the life of the individual or even of a long series of generations is upon the marvelous structure and function of the sex cells, their potencies contain somehow the most perfect and indeed the only true history, because in these is about all that Nature found it worth her while to preserve. They epitomize all quintessential values and most truly remember all the really important things that have happened in all the past of life.

Thus, it is the cells which conjugate and they alone that experience the great salvation while all others are destroyed, and in their obliteration all the processes that evolved them are made vain and nugatory. Even their vast number was evolved to increase the chances of fertilization for the few

elect that achieved the great goal of meeting their counterparts; for colors, ornaments, sex organs and all secondary sex qualities, selection itself and every device of animal and human courtship, even love, are to lessen this prodigality of loss. Truly biological thought sees in the struggle of these cells to survive by merging their individual being in each other, the original spring of love which in all its multifarious expressions is only serving this call of cells for one another. Far beneath all conscious purpose and effort this is basal and dominant throughout. With this cell appetency as its kinetic mainspring, love has become the mightiest power in the human soul and therefore will be the most important theme in a complete science of psychology. Nothing else so easily or so often conquers death itself and subdues and even reverses the universal struggle to survive till the individual wills to die for the larger interest of the race. In no other field are conscious interpretations of motives or acts so inadequate, and despite the fact that the welfare of the species is so generally or entirely thought to be that of the personality alone.

To understand the specific form of *sex shame* involved in covering and uncovering the body we have to accept the indications that from so many diverse fields converge to the conclusion that at some early and probably long-enduring stage of human evolution man was proud of his sex and ostentatious of not only the organs but of all, at least anatomical, if not most physiological manifestations of its activities. In very many animal forms nature's system of ornamentation centers about those parts in the male. The young male was not only conscious but conceited of his recently developed virility. As flowers are ornamented sex parts, although their beauties are addressed not to flowers of the other sex but to fertilizing insects, so the very plan on which man's soul and even his body is organized is such as to call attention to these parts and functions, variation in which is extremely manifold, and what is more important, characteristic and enlivening. After so many superposed strata of restrained concealment and convention that have now become instinctive and hereditary, it is very hard but yet probably necessary to conclude that the uncovered organs themselves were once the very focus of interest and charm, and that sight was the leading erogenic zone. Only thus can we explain the impulse of the exhibitionists, which is thus seen to be a psychic, as *harelip* is a somatic, rudiment. How strong this impulse is in pubescent boys, despite ages of repression, masses of unprintable and, to those unacquainted with the facts, incredible data, show. Phallic worship, traces of which are found

among every race, is also in part an expression of the sense of the supreme attractiveness of these parts and their functions, and it teaches us their value as apperception centers to explain the processes if not the origin of the world by procreative symbols. This first prepared and predisposed the psychic soil to receive in due time the lofty doctrine of the fatherhood of God in all its first crass sensuous literature, and later in its spiritual form as love became sublimated and purified. Gross and carnal as this genetic factor of our higher religious life was, the frank acceptance of it confirms faith in religion by purifying that one of its rudiments which springs from this old and strong instinct and augments confidence in human nature because it has made a thing so high out of one originally so low. Even phallicism was soteriological; that is, it was a product of man's instinct to save himself by sanctifying parts, ritualizing acts, generalizing ideas and purifying functions felt to be of momentous import and at the same time in need of control.

The conclusion that the primitive instincts show off precisely what man now almost everywhere so strongly tends to conceal really rests upon evidence that cannot be adduced. Its foundations are in returns not fit to print concerning boys whose instincts are unrestrained and who are often thought more degenerate than they really are, and also in the repulsive, yet psychogenetically very instructive literature of sexual perversions and inversions, especially in those forms of aberration that are most often found among the young and are thus more spontaneous, involving competitive pride in every structural and functional manifestation of virility and in the assumption of supreme interest therein by the other sex. This becomes abnormal and excessive and is without parallel in any of the forms of subhuman or animal life. This hypertrophy of this part of man's nature thus marks his point of divergence from that of the lower forms. The development of human nature contributed to make these parts and functions more focal to consciousness and that in several ways in the here tabooed literature.

How, then, did sex shame and modesty first arise? All modern studies only confirm the faint hints of the book of Genesis; the post-coital state of flaccidity and exhaustion demolishes at a blow the above pride by reducing suddenly to a prepubertal or sexless state, so that it is precisely this exhibitive instinct that is temporarily annihilated, and here modesty begins in the reaction. It is in this state that hiding and concealment and conscious shame arose. This neutral condition is normal but becomes socially conscious just in so far as the virile state had before been ostentatious. It would have been felt only toward the mate if she alone had been made aware of the precedent tension and there would have been less desire to escape from this condition into the active state. But there is now enhanced consciousness of others not only of the opposite sex especially during turgescence but of those of the same sex who despise the neuter state. Thus excess arose because ostentatious-

ness before clothing or the youthful impulse to exhibition alternated with detumescence and it was in the latter case that the instinct for clothing, at least local, arose. Had there been absolute morality of gratification for offspring only, man might have remained naked but unashamed. First, however, his old sex pride, born of precoital vigor, entered upon a conflict with the humiliation by gratification, and the latter in time won, because depletive states with their attendant shame were prepotent over the old erethic consciousness and man grew more ashamed because he had been too proud. We can imagine a period of which there is, to be sure, little anthropological evidence now extant, when man was covered in the relaxed and exposed in the tense state, and many kinds of clothing are effective only in the former condition. There were, of course, other motives for concealment of the detumescent state. They would advertise perhaps illegitimate indulgence, aid in tracing those who had been guilty, proclaim a degree of exhaustion from its local signs whether due to excess or the approaching debility of age. Impuissance has always been held to be a reproach and the advance of this stage causes acute mortification which is the obverse of primitive pride. Finally, signs of vigor here mean virility, and the formidableness of many an enemy decreases with the physical symptoms of exhaustion.¹

The promptings of the sex instinct in the soul, especially in that of women, are so submerged that they are often unconscious of its very existence, even though their life be largely made or marred according to the degree of their normality. While the unwritten canons and codes of frankness differ very much in different ages, lands, and circles, there are always and everywhere limits which conversation, literature, art, must not cross. These are found in even the periods of most license and impunity. Again, parents often feel an almost insuperable reluctance to speak plainly of things in this field to their children, as do children to parents; while patients are armed as with a triple mail of resistance against confessing to their physicians things that the latter need to know. The tensions caused by these manifold repressions constitute a long and intricate chapter in the pathology of sex, and are connected as cause and effect or both with nearly every form of aberration. Lies—conscious, unconscious, spoken, acted, social, personal—have here their chief center and stronghold. Here a sense of sin, melancholy,

¹ Richard Ungewitter, author of *Die Nacktheit* and also *Nackt* represents a movement in Germany for the direct cult of nudity. Those who advocate this cult urge that occasional exhibitions unclad to others would be a very great stimulus to body culture and would increase the æsthetic feeling for the human form divine; and if such exhibitions were public and held in the morning, much good might be done. H. Pudor distinguishes this movement with the greatest moral vigor from evening stage and popular nudities, which have the opposite effect from that which this movement strives to develop.

and every depressive state has its chief and hidden root; manifestations of human life, including religion itself, go with normality. Thus it is no wonder that psychic pressure between opposing forces is here so great, and the contradictions so diametrical that it is harder to be sane and temperate in speaking or writing upon this topic than upon any other. Here moderate men become dogmatic and extreme, the taciturn becomes loquacious, or *vice versa*; and mental poise seems almost as hard as perfect moral self-control. Moreover, all problems here are so infinitely complex—because so many of the chief interests of life center here. A recent writer finds over five hundred different theories of the nature of reproduction, showing that even science has lost its bearings in this realm where poetic license is always allowed the greatest literary extravagances, for who is so fond of superlatives as the amorist? one of whom exclaims: "Who has ever loved without perjury?" and another "What gentleman would not lie here to shield his honor or that of a lady?" Has man become morbidly self-conscious here? Has he a sense of fear or guilt? Is our own experience or the facts we observe too painful to contemplate, and far more so to confess or teach the lessons of to others? Obscenity alone breaks ruthlessly through all barriers and finds satisfaction, if a brutal, coarse one, in so doing. It may give surcease from the ubiquitous constraints and bring a sense of freedom that always has a certain sense of relief if not exhilaration. But every spoken or acted indecency is universally condemned for several reasons: first, because it is grossly irreverent toward organs and functions that are essentially sacred and holy as is perhaps nothing else; and, secondly, because it is always ignorant and such information as it conveys is usually morbidly perverted. Science and the social consciousness are now breaking down many of these reserves in the interests of racial welfare and a new moral pedagogic attitude is now being taken toward sex. Once, tuberculosis was thought to be best treated by inclosed rooms, with all draughts excluded, as if pure, fresh air was fraught with special dangers, whereas now the out-of-doors with exposure to every wind and weather, day and night, summer and winter, works wondrous cures. Perhaps open ventilation and a less stuffy atmosphere may be a therapy that will prove no less beneficent for the great and growing sex evils of our day.

That they are both great and growing, few will deny, as even the meager statistics available indicate. If the darkness were suddenly lifted in this field in any community, there would no doubt be consternation at the bare facts which hypocrisy conceals. But we are not pleading for exposure of those who lead double lives, for no more good could come of that than from the revelations of divorce and criminal courts served up by the "yellow" papers. But there is now a wealth of vital, practical knowledge largely new—pathological, physiological, psychological, and sociological—that should be brought to bear upon the darkness of ignorance and widespread and

devastating errors of living. Even the slogan that whatever is biologically right is morally right, dangerous as it is, would on the whole doubtless level up, far more than it would level down, society as a whole.

The story of the psychological causes of the extension of the area of interest from sexual to other parts of the body so far as motives of modesty were involved is relatively plain and simple. Sex interest would now be less direct, more circuted from primary to secondary sex qualities. As breast, thighs, hips, abdomen, etc., came to be regarded as sexual zones, accessible to sight and possibly to touch, they would at first be exhibited with pride as erotic charms. How strongly this persists we observe on every popular beach in bathing hours, in the passion of youth to parade their form and to set it off by every device of male coquetry! Concealment itself is a positive excitant to the imagination. Here, too, youth and maidens are alert in preparing for and in undergoing each other's critical examination and in making new experiments of this kind.

This newborn sense of shame and modesty that nature spreads out over everything sexual at the dawn of puberty and of its *sex éclaircissement* in boys, but far more in girls, is of the highest protective value. It is an instinct which no amount of teaching or reflection can supply the place of. It must be trusted for all it is worth, for here to deliberate is too often to be lost, so much wiser and surer is intuition than reason. Maidenly modesty is a kind of placenta in which virtue grows to the maturity of motherhood. It is the very opposite of prudery, for that is born of false knowledge. It has always been one of the best things in womanhood. It is not sullied by but carefully and completely assimilates all knowledge in the environment that is needful for life. At this stage instruction should be given girls if possible by mothers, else by older women friends who are dear and respected. It must be given only as interest is ripe and at the right moments, must be of right kinds and amounts. For this sort of information is utterly unlike that of the school curriculum because information thus given is not and should not be of the examinable kind, but this knowledge more than any other tends to sink to those subconscious strata of the soul which regulate both thought and life. Pubescent girls need indirect suggestive methods in which facts and laws are as it were so casually dropped that the learner hardly suspects any intention to instruct. Thus the more condensed this information is the deeper and quicker it is absorbed and becomes practical, while if systematized and hepedagogued and expatiated on, as is done in most of the far too big books for the young, to read which hold the attention far too long upon these subjects, then the knowledge lingers in the mnemonic merely cognitive service of consciousness and is not at once transmuted into will power. Sex knowledge at this stage must not be a mere object but must become an organ of sense apperception, while in the latter teens teaching can be more methodic and systematic.

Möbius and Bosma, reviving the idea of Burdock, argue for wedlock based on passion rather than reason. These writers urge that all should marry in their bloom and in the fullness of youth; that delay which brings in prudential and social considerations is injurious to vitality of a stock as shown in posterity. The *nisus generativus* is, if illuminated and guided by a little physiological knowledge, with sufficient but not too prolonged inhibition, the best of all guides. Overripe parents are not the best. Beauty should be considered as the very best expression of health. Its instant appreciation in the other sex is a kind of instinctive or intuitive diagnosis that is generally sure and true. There is no such delight as that in beauty. On the other hand all that is ugly and hateful is usually more or less morbid. If man were not an animal smitten with the delusions of greatness he would be less prone to error here. Nervous men and women often attract each other, but such unions, while they may be happy, reënforce nervousness in the offspring, which is the only true criterion. The vitality of those not yet born should be ever in mind. Ziehen insists, against many authorities who hold the opposite view, that nearly every kind of healthful excitation aids to healthful control during the probationary years. Idealism and enthusiasm repress and take the vigor from evil thoughts. If this is true then emotionalism is a kind of safeguard.

Many criteria have been suggested for distinguishing *maidenhood* from the state following its loss, such as the enlargement of the thyroid glands and the circumference of the neck, the deepening and perhaps roughening of the voice, the state of the hair, greater sensitiveness of the vascular system as shown, e. g., in blushing and flushing and many others, but none, not even the most popular sign of local rupture which may be otherwise caused, is infallible. This should be known, for many husbands from implicit reliance upon certain of these popular tokens have been unjust and caused needless suffering.¹ Among primitive people, pregnancy generally coincides with wedlock and with the loss of virginity. The average interval between the two events increases with civilization. During

¹ The old views upon this subject are copiously summarized by Schurig, *Syllepsilogia*, 1731, and *Parthenologia*, 1729.

this period, some writers think there is usually a gradual, if slight decline of procreative energy so that children born a year or more after wedlock are more liable to be deficient in vitality or vigor of the developmental nissus. Some hold that this is not an invariable rule, but that in certain cases more or less delay may be favorable. This of course depends on many factors, such as the habits of the father before and the degree of temperance after wedlock. I can find no authority upon this subject who approves the customs of the honeymoon, for the advantages of rest and diversion are thought to be overbalanced by errors in diet, excessive venery and other irregularities. Wedding cakes, drinks, the long excitement and fatigue of the latest stages of courtship and the multifarious preparations for the modern wedding, with all its attendant nervous strain, are prone to leave the system too exhausted to perform well the supreme function of transmitting life. Under these conditions the curve of procreative efficiency may rise for days, weeks, and possibly for months after a fashionable marriage till it declines again under the stress of exhaustion. Those who discuss these questions from the new standpoint of what is now called ethical or biological marriage so far take very divergent and often extreme views upon all these points. It is certain that for some, under exceptional conditions of health and environment, long delays before conception are prejudicial to the highest welfare of posterity and that it is here that the interests of the unborn and the instincts of self-indulgence on the part of the parents are at their acute stage of conflict and every maxim of moderation is most needed. For a time the gratification heightens desire and those who make the marriage license a warrant for orgastic excess become for a season more or less intoxicated by pleasure, and only after a period of abandon that sometimes passes over into symptoms of more or less permanent aversion is it learned that a Nemesis, that in morbid natures may pass into postcoital rage and violence and in normal natures may lay the foundations for conjugal discord, has erected adamantine limitations to even love. Sometimes women welcome this postponement of conception in the belief that thus the ties of affection are strengthened, feeling that their husbands and not the interests of future generations have the first claim

upon them and thus without realizing it, slowly become the mistresses of their spouses rather than wives. Some are encouraged to do this by him and by the mistaken advice of friends. Universally known methods of prevention make this now possible. Others deem it better for the race to wait until the period of initial stress and strain has passed.

Menstruation is incipient pregnancy and the close of each period suggests abortion at a very early stage. If the ovum is fertilized these symptoms pass over into those of gravidity by almost imperceptible gradations. The physical and especially the psychic processes which attend the maturation and descent of the egg about which the phenomena of the monthly flux center and which cease with the *petite abortion* if exclusion continue and are enhanced if it is impregnated. From the moment this occurs the maternal body and soul are progressively subordinated to the interests of the embryo, which causes profound modification of every tissue and physiological process. Not only the mother's appetite, digestion, circulation, complexion, and form are influenced, but the hair is in better condition, the eyes more expressive, the temperature increases, pigmentation is augmented and even the finger nails, as Esreicht has shown, become thinner and more delicate. The posture is more erect as the back arches in and the abdomen protrudes and this erectness is the attitude of the pride one should feel when "elevated above the level of ordinary humanity to become the casket of an inestimable jewel." The new pelvic focus of vascular activity affects the heart, or at least its right ventricle which may enlarge somewhat to perform the new work put upon it. The quantity of blood is augmented and if the red decline, white corpuscles are increased. The glandular activity is modified and salivation is often stimulated. There is more vascular excitability as is shown in blushing and flushing, and this there is now much reason to think is due to the vasoconstricting action of the suprarenal bodies alternating with the dilating action of the thyroid secretions. The latter agency predominates. The child is formed not only out of its mother's food, but out of her very flesh, so predominant now are the interests of the species as represented by the embryo over those of the individual mother. The nervous system, too, is more tense, active and

excitable. The knee-jerk increases as pregnancy advances, especially in its later stages, as do the other deep tendon reflexes, both most with the first pregnancy, while electrical excitability and all the superficial reflexes save the abdominal are reduced. Nausea is more common and this is thought to be partly physiological and regulative of equilibrium. Vomiting is a convulsive and nerve controlled act and may lead on to eclampsia, convulsibility being in general more common in women than in men. Some think vomiting may have different causes—neurotic or hysterical, reflex or toxæmic. It is rare among savages and unknown in the higher animals and is said to be absent in those who menstruate without pain. This would suggest that it is pathological. From a study of 300 cases, Giles found it most common in the second month, that only one third were free throughout and that there was less sickness in the third than in any other pregnancy, the age of twenty-five being most immune. The tensions set up may overflow into the muscular system causing chorea. The uterus of course becomes the seat of active irritation and contracts rhythmically. This perhaps serves to impel the blood through the large venous sinuses where stagnant pools of blood tend to accumulate. This action, varicose veins, stimulation of the breasts or vagina and nausea seem to be all more or less correlated if not causally connected, but in this direction the limitations of our knowledge are almost oppressive.

One characteristic trait of pregnancy which develops upon the above basis is the *pica* longings or even obsessions of appetite. Some women are impelled to eat earth, sand, filth, ashes, pepper, salt, mushrooms, lemons, insects, raw meat, roots, and the most offensive substances. They may wish to smoke, drink, bite into human or animal flesh, swallow pebbles or coin. The acute antipathies are also pronounced, if somewhat less so, and they include nearly every kind of food and drink which before had been preferred. Various theories have been held concerning these caprices, e. g., whims of appetite frequently express what the growing body of the child and the mother's system really need to perform well the work of gestation. Another view is that the longings are in order to overcome nausea, but it is now known that the number of women with and without nausea who have

marked longings is about the same. Again, the popular opinion that such *picæ* are natural suggests them to women and they are indulged because it is thought that to do so is beneficial to the child, although in fact it is of indifferent value. This is doubtless very common. Upon some women who lack them, they are sometimes almost imposed by the solicitude of friends who think them necessary to normality. Occasionally desires for special edibles are intense and persistent and sometimes they rather suddenly turn into aversion. Ellis¹ states that women who have borne most children are least likely to have these desires, and they are most common in first pregnancies from which he infers that they are chiefly products of suggestion. Such whimsies of appetite were found in antiquity and exist in the Orient and among most savages and have thus been thought to be universal and normal. They are perhaps most common among women of the lower or middle classes leading simple and perhaps natural lives. Such longings, according to Giles, are chiefly for fruits, the apple, which is very prominent in mythology as a sacred or magical food, many a legend connecting it as well as pears, citrons, lemons, oranges, and other aciduous fruit with feminine taste, leading all the others. Cravings, as we have seen, are most common with young women and are, or may be, a revival or continuation of those of childhood. Children are subject to fits of greediness for delicacies that may become almost morbid. Girls especially crave sweets and fruits, particularly at the dawn of adolescence. Bell² thought that the food proclivities of children repeat the history of the race, and noted that in midadolescence there was a revived lust for fruit. This is doled out in such small quantities that the desire for it may be left so strong as to prompt theft to get it. Some think these appetites for fruit are themselves seasonal quite independently of the fact that the ripening and supply of it is so. In some places and periods, these desires of pregnant women are regarded as almost hallowed and they are allowed in this condition to take fruit freely where it is otherwise forbidden. Even

¹ Studies in the Psychology of Sex; erotic symbolism. Davis, Philadelphia, 1906, 214 p.

² An Introductory Study of the Psychology of Foods. Pedagogical Seminary, March, 1904, vol. 11, pp. 51-90.

law has often admitted the partial irresponsibility of women acting under this impulse.

The more probable explanation of this very interesting phenomenon seems to be that realizing their condition and feeling that they must now eat and drink for two, women naturally pay more than usual attention to their diet. Feeling themselves somewhat privileged and possibly with somewhat lessened cares, they become more conscious of their likes and dislikes and the gradation of their tastes and aversions is laid off on a more extended scale. They become somewhat more careful in preparing their food and take more pains, while their appetite is at the same time becoming greater. Latent and past impressions of what they have enjoyed or what has been good or bad for them in the past crop out and their dietetic consciousness is intensified. All this tendency is reinforced by the tradition that these preferences are significant for the child and they feel not only justified in indulging them, but study them and thus in self-indulgent or neurotic mothers the way to extreme and fantastic freakiness is opened. The new nutritive demands, moreover, often impel to a change of the quality as well as of the quantity of ingesta, and so hunger gropes and circumvallates in all directions to find its way to the new metabolic equilibrium which the system requires. Among the memories of former preferences those of puberty, which was the last era of reconstruction of nutritive habits, are revived easiest and first as a result of these gropings. Such recrudescences of earlier individual experiences are thus naturally and necessarily in the same direction as that of the phylum and thus the appetitive tendency reverts to fruits, raw meats, and other foods of the past of the race. It is thus that the tastes of pregnancy so often suggest the eating habits of an earlier stage of evolution, because the embryo which is now in this era of recapitulation calls upon the mother's body to supply what in some remote age our progenitors gathered from trees, dug from earth, or caught and killed for themselves perhaps even before the age of the control of fire and cooking. If this explanation is correct, the call of the unborn child in the mother's body for the ancient pabulum of the stirp which was once supplied by its own voluntary efforts has now lapsed to an organic demand laid upon the mother's

blood and body, and becomes a component element of her own body. Hence, the resultant is the compounded needs of parents and child which results in the compromise that harks back toward the earliest conditions represented by any of the factors with a strength and to a degree proportionate to the relative intensity of the two instincts: that of the mother for her own needs and that of the child for its. That these whims are often most developed in the earlier stages of pregnancy is due to the fact that the first demands of the embryo, though weaker, represent an earlier stage of the food history of the race than that represented by its more mature period of development due to the fact that the first unsettlement of the previous maternal dietary resulted in a greater range and plasticity of appetite and digestion, the initial arrest and reversion of which is more conspicuous to the mother and more observable to others.

Birth- or mother-marks (Verschen, envie) are popularly believed to be impressed on the child's body or psyche by powerful influences made upon the mother during pregnancy. A child is born with deformed feet because the mother saw a rabbit killed by a cat which ate off its paws. A nævus on a babe's arm was thought due to the fact that the mother tended the father who had been severely cut on the same arm and in the same place. A fleshy substance growing from the spine of a child was ascribed to the fact that the mother when milking had clung to a cow's teat which this excrescence resembled when kicked over. A bull frightened a mother whose stillborn child had a head "exactly like a cow." The child of a mother who had been frightened by a dog was marked by a large hair mole. A child born with flexed legs owed them to the fact that the mother had seen a beggar similarly deformed. Another infant had a patch of soft hair on his cheek because the mother had been struck there by a young hare the father had tossed from the hay to her. A man bled a sow by cutting a patch out of its ear. The wife saw the act and bore a child whose ear had no helix. After reading a story in which one of the characters had six fingers the mother bore a child with an extra digit. The belief in influences represented by these cases is as old as the Bible story of Jacob and the ewes, and Ellis states that this view was never seriously

attacked till the eighteenth century, but now for a century and a half it has been denied and affirmed by physicians and is still an open and much-discussed question. It is hard to conceive how such influences can operate since there is no direct nervous connection between the mother and the child and few cases have been critically studied. In certain instances the cause of the defect occurred after the fœtus was so well developed that if there was any influence it must have worked retrogressively and then reconstructively. Moreover, such cases are rare, Bischoff having found not one in a record of 11,000 births recorded promiscuously. Still, not a few eminent gynecologists credit such influences and think that coincidences cannot explain them. Perhaps most would not deny that prolonged and strong mental impressions may cause vascular and nutritive disturbances, irregularities, and even idiocy and arrest. The effects of mental and emotional disposition have been less discussed. Out of ninety cases, Dabney found twenty-one definitely ascribed to shocks occurring during the first three months of pregnancy, and thought that in these cases the cause occurred before the development of the part affected had been decided. Some have invoked modifications of the blood to explain it. Fère thinks strong emotions cause local diversities of pressure of the womb upon the embryo and so may at least cause fœtal movements and that yet vaguer developmental neuroses and disharmonies may result in malformations. Experiment shows that slight causes such as odors may profoundly modify the embryonic growth of chicks. The relations between mother and child *in utero* are of course extremely intimate and are not unlike those between the chief subordinate parts of the nervous system in the same child when they are growing from independent centers and have not yet joined, or the connections may be analogous to that between the gland nerves and the brain. Parts of the latter develop first in relative independence of other parts. Marshall suggests that thus the embryonic processes form a subordinate and parasitic part of the consciousness of the mother and speaks of two brains that may be attuned to coaction, while emanation, influence, and even telepathy have been suggested. Pregnancy induces a unique psychic state, in some causing tension, in others relaxation. There may be depression, or

exaltation, hysteria or apathy, increased or diminished sex feeling, heightened or dulled intellectual states and processes. It is thus a paradoxical condition. Till very recently no pregnant woman ever sought to express her psychic states, but that these should be known and controlled and that they have an important influence upon puericulture is certain. Even Ellis says that we can here do little but wonder and adore as in the presence of a divine creative act.

Consanguinity of parents per se perhaps exercises no unfavorable influence upon children. So at least Feer¹ argues. From a summary of the copious literature and statistics upon the subject, it appears that only in retinitis pigmentosa and congenital deaf-muteness, and possibly in a few other diseases can a predisposing cause be traced to the blood relationship of parents. Of course parents who are relatives are more prone to the same diseases or more likely to be exposed to untoward external influences and it is to these that the deleterious effects of the marriage of relatives is to be chiefly ascribed. There are many cases of children of consanguineous parents who are normal in all respects through life. Enthusiasts for race improvement have often urged legislation respecting the degrees of relationship within which marriage should be allowed, but as the evils of inbreeding are insignificant in comparison to those arising from the intermarriage of consumptives, syphilitics, deaf-mutes, insane and alcoholic, restriction laws, if any are to be enacted, should begin with these latter. Many authors urge that human inbreeding tends to reënförment and potentialization of heredity in certain directions and to diminish not only variation but energy in others so that new blood is needed for new combinations. If, and so far as these accented qualities are good, wholesome variation may result. The problem is best studied among animals and plants which breed more rapidly than man and here full-blooded stirps often thrive for many generations with not only inbreeding, but even with incest. Thus more or less stable race constants may arise and fertility as well as hereditary effectiveness may be augmented. But beyond a

¹ Der Einfluss der Blutsverwandschaft der Eltern auf die Kinder. Karger Berlin, 1907, 32 p.

certain very variable point, degenerative processes develop yet more rapidly and decadence results so that crossing brings wholesome reconstruction. Both primitive and transition races seem most immune, while with those that are civilized bad results appear sooner. Reilmayr¹ urges that human culture has been very dependent upon, limiting both by culture and by law the racial range of intermarriage, and if the latter be freely contracted with members of lower stirps progress is arrested. Not only caste but language and religion have set up wholesome barriers. Bees and ants owe their high instincts to inbreedings. Yet, if restrictions are narrow or too long continued, rigidity and stagnation result. Then crossing with vigorous but less developed stock brings new life. Once hereditary disease was far less than now so that the rhythm of the three stages, inbreeding and progress, stagnation, mixture, and renewed progress followed each other with less rapidity than now. Among the ancient Persians, Egyptians, and the Incas of Peru, brother and sister, father and daughter, mother and son, married with impunity and the last of the Incas is said to have been the fifteenth generation of marriage with a sister which was proscribed. Lorenz is inclined to think that this worked very favorably for ennobling the race under the conditions that existed then and there. For determining the optimal degree of relationship that is favorable, of course we have no norm. In many statistical studies of important data even the degrees of relationship are often omitted. One of the best of these by George Darwin² in which the results of the marriage of sisters' children appears, shows but surprisingly little deleterious effect. The best data are from the studies of special diseases, but often here methods are still unsatisfactory, and consumption, e. g., is so very prevalent everywhere that it is difficult to obtain a reliable basis of comparison. The best of all recent studies are those by Mayet³ who compiled his data from 150,000 inmates of Prussian institutions and who showed that for even such diseases as simple insanity, paralysis, and epilepsy, the effect of the consanguinity of

¹ *Inzucht und Vermischung beim Menschen*. Leipzig und Wien, 1897, 268 p.

² *Die Ehen zwischen Geschwisterkindern und ihre Folgen*. Leipzig, 1876.

³ *Jahrb. d. internat. Vereinigung für vergleich. Rechtswissenschaft und Volkswirtschaftslehre*, 1903, pp. 193-210.

parents was extremely slight, if indeed it was a factor at all, although for imbecility and idiocy a slightly better case was made out. Even though we may doubt the full effects of consanguinity *per se*, such marriages are in fact usually unfavorable and may be highly so in civilized lands to-day because they involve a greater liability to similar deleterious circumstances, while mixtures tend to eliminate hereditary effects, for we cannot escape the fact that in a general way destiny is ancestry.

The genetic study of childhood begins with that of love, the spring of life; not the prenuptial love of courtship, but where all novels and romances that deal with it end, with wedlock. The one field is rankly dight with about every fair flower and every noxious weed that the rich soil of fiction and fancy can bring forth. The other, of vastly more import for the future of the race, is less accessible, so less often exploited. Its joys should be and doubtless are on the whole far deeper and more lasting than those known to wooers or wooed. It is its dissonances rather than its harmonies that are most audible outside the reserve that veils the inmost circle of domestic life. Although medical records and those of divorce courts show the indescribable physical and mental torture which sometimes exists in marriage, yet despite the suspicions of gossips, the popular gibes of the stage and press, the coarseness of cynics, the black pessimism of *roués* and the often radical reconstructions of it proposed by fanatics, the wedded state with all its failures is, we must believe, on the whole and for the great majority the chief condition of human happiness.

While comprehensive facts and statistics on matters so sacredly secret are inaccessible so that we lack data for all qualitative scientific statements, it seems probable that the majority of husbands and wives do not yet follow one of the great laws of nature that even the commonest observation of animal life should teach, viz., that the female should determine the times and conditions of her fecundation. In all stages of life, save the human, the female makes this great decision and everything we know strongly indicates that it would be immensely for the good of posterity if this were the case with men. Motherhood should be craved, and if it is reluctant or

coerced is sure to be below its maximal efficiency. The deepest, oldest, and strongest inclination of the wife is to accept her husband at the proper time and for the proper purpose. Of the former she is the best judge. If she permits herself to become fertile against these instincts, even because she would not disappoint, her motherhood cannot be ideal, nor can his fatherhood. This is the supreme natural right of woman and the entire movement of the last few decades for her emancipation will be more or less abortive if it fails to attain this, its chief goal. The good husband can and should do much to control the desire of his partner, but the final verdict should always rest with her and she remains dethroned, without her crown, an exile from her paradise, until it does. In most of the recent efforts of her sex for larger liberty, more power and knowledge, the biological psychologist sees only a struggle toward this end. Though she may not recognize or understand it, all she has won is precious chiefly in so far as it helps to this great *coigne* of hereditary vantage, and even if she half unsex herself in the effort, she will make good later if she succeeds here. Beneath the thinnest surface, normal and complete love in every healthful woman is essentially hunger for maternity. Man can partly transmute this into lust or can more easily and perhaps does more often intimidate it by the very vigor of his passion into the fear that to bear a child might divert his interest to another and thus the woman's self-sacrifice and pain that should go out toward her child is lavished upon her husband. This is one of the tragedies of wedlock. It has even been argued that if the cruel choice had to be made, strange women and dual lives on the part of the men would, from the biological view point of the good of posterity alone considered, be better than generations conceived on either side with violence, aversion, or by accident. But I know no scales to decide the relative weight of two evils both so great.

While the attitude of no great numbers of men toward this ideal has ever yet been systematically canvassed, there is abundant reason to know that it varies greatly. Hundreds of communications that have come to me in the last ten years show that not a few young men contemplating wedlock resolve with all the energy of soul they can muster upon just

this course. Reasons for everything done or not done, while sincere, are more often fantastic and utterly foreign from the real motives that impel conduct in the field of sex than anywhere else. Some fall away from their high resolve because many, if not most, wives have been led by others to expect both frequency and subjection and because men fear that they will be else thought deficient or subnormal in vitality, and so they exhaust themselves and set a pace that they know to be ruinous if maintained, but which they also feel it would be a confession to greatly reduce. This initial ignorance and misunderstanding of each other's nature and real interests and even desires is now as always the serpent that enters man's Eden. In other cases love itself decrees that the will of the partner with the greatest desire shall rule, and that of the other bend to it, so the way to Avernus is entered upon, when, if the weaker led there would be hope. It is a physiological law, too, that every excess brings reaction, be it a new sense of general insufficiency for the tasks of life or censoriousness for the mate, whether passive or dominant and sometimes of violent and tragic vengeance, as in postcoital torture, mutilations, and murder. A sense of weakness of either mate inclines to the postponement of childbearing till more favorable seasons and this is one motive of the use of preventative measures now so well known in nearly all families in civilized life. The rhythm of inclination often differs between mated couples and one or the other hesitates, now that the matter is so easily controllable, to chance the hazard of the new fortune of parenthood. Very prevalent again is the sentiment that at least a season—the wedding tour, the first year, etc.—may very properly be set apart for enjoyment before the interests of posterity are considered. If the abated vitality of children born short because engendered by parents who had selfishly wasted the bloom of their powers were understood by the victims of these ills, few commands in the Decalogue would be so violated as that to honor parents, for they would deserve only dishonor. Conscious overindulgence is often palliated by previous resolutions of atonement afterwards, such as by some exceptional restraint, by unwonted labor, rest, diet, vows of continence for a definite term, etc., and no moment of life is so fecund in good results as the brief interval follow-

ing those acts of the union known at the time to be excessive. Intemperance in the exercise of this function is probably the chief cause of the abatement of love, aversions, and separations, and is the parent of a long list of evils now growing rapidly with growing knowledge of deaths, diseases, defects, insufficiencies, and perversions of children who have been robbed of the most primal of all human rights, that of being well born. These are but few of the ways by which the most laudable purposes of those about to wed have come to naught.

The ideal of intercourse for offspring only which is also the general lesson from the animal world, where it is bound up with the fact that the female's *voluntas* or *noluntas* rules, is cherished by many types of Utopians and theoretical moralists and reformers, not counting here the fanatics of sex who call its function a necessary evil to be as nearly eliminated by asceticism as is possible without depopulation. The view of most who advocate this principle is expressed by the phrase "the more restraint, the better the product." That for some, perhaps many, and especially women, the rule is both commendable and attainable there can be no doubt. On the other hand, there are many who urge that this would involve too great restraint, would abate love in man, since one of the grounds of his superiority to animals in nature is that in him love has acquired rights of its own which animals know not, that it would involve the eradication of a habit very slowly acquired by the race and which has come to have great hereditary momentum. When we realize the impetuosity of this instinct, especially in young men, it seems at first a plausible view that Nature herself, if not by her prime intention has in her present, *de facto*, or if one pleases to call it, fallen dispensation adopted another less rigorous norm. Some again insist that she has provided for this by lavishing upon man, who excels animals in so many other respects, superfluous power in this also. The very diploma of manhood which she has conferred upon him elevated him above the laws of lower forms. Thus, men have both complimented and licensed themselves and granted charters and concessions to their own inclinations, thus keeping themselves in countenance and living as others do. This view is held by many candid and competent stu-

dents in this field whom no one could for a moment suspect of consciously compromising with or apologizing for selfish gratification as such, although so profound is the tendency to justify actual widespread practices that this ideal probably finds more whole-hearted advocates among maturer men in whom passion has begun to abate.

We believe, however, that from the standpoint of the highest virtue, which is indistinguishable from the supreme good of the race, every attempt to justify indulgence beyond the actual needs of the continuance and increase of the race is merely specious and wrong, and that when we attain true knowledge of good and evil, such views will be cast beside the old and still widely prevalent belief of adolescents that the vital fluid is dangerous if allowed to accumulate. In fact, there is no disease known to medicine and no defect in offspring known to students in heredity that can be traced to restraint or continence, but those now known to be due to excess are of great and growing number. There is in fact one sure test, somatic, and yet as suggestive as conscience, and that is whether or not there is great, lasting, and subsequent enhancement of all physical, and elevation of all psychic, powers and satisfaction and not an inclination of desire, a new poise, a reinforcement of strength and of euphoria, new ambitions, a greater power of accomplishment and endurance. This regeneration must be mutual and measured summatively by taking account of both the man and the woman, although probably the latter should on the whole count for more than the former, for her soul and body are better criteria and her experience is more massive and normative. There must be no alloy of scruple, doubt, or anxiety, however caused, but only a sense of overwhelming good that has come to stay and has given life a new direction. The psychic factors in it all doubtless greatly outweigh the physical if this too intrusive distinction be given any place in so unitary and totalizing an experience. Selfishness must be entirely and supremely transmuted into love, so that each can be happy only in and with the other's joy, and no vestige of duality remains, and the after-effects of it all must be so tranquilizing and perdurable that they long seem indefinitely preferable to repetition, and thus the joys of a full realization must and will for a long period eclipse even

those of anticipation which made courtship and engagement so full of charm.

The effects of the first conjugal experience upon young women though perhaps unduly magnified by the church, which has idealized virginity, are psycho-physically great. So much romance, curiosity, and perhaps desire, not unmixed with fear have focused in advance upon it that there is naturally a unique sense of realization and of initiation into complete womanhood. One chapter of the book of life is closed and another begun; a mystery is solved; a goal attained; existence is more real and many things take on a new meaning. In normal natures the world seems suffused with a certain joy unknown before; physiological vitality is more or less enhanced; unused functions come into play; life is more completely polarized and charged with a worth and value unfelt before. There ought to be a mild ecstasy and exaltation of soul and the dull prose of life should become more or less poetic. If, however, there is defect on the one side or violence on the other, all this is changed and disenchantment may turn joy to ashes, and in an hour love may pass into deep-seated and permanent aversion. In the great majority of cases, euphoria is mingled with more or less dysphoria, and thus these initial experiences are algedonic, giving a new polarity to human nature as it expands under the influence of its two sovereign masters, pleasure and pain.

Good Fatherhood and Sexual Insufficiency.—To be an ideally good father one must be all a man, hearty, healthy, masculine, worldly, not a bookworm, a devotee or an ascetic, not predominantly sedentary in habit or too devoted to office, counting room, or shop, nor overabsorbed in frenzied finance or anything else very nerve wearing. He must not be chronically anxious, penurious, or censorious, but must cultivate a more or less Aristotelian temperance in all things and be a little more capable of appreciating than of criticising. There must also be congeniality, content, more or less prosperity so that life can be a little easy going; a man must not be fighting a losing battle either in health, business, or repute. Nerves and negative tenets are both unfavorable to true and full paternity which must command the sincere respect and affection of a wife, who must not be educated in a way or to a point

that will cause her to feel him inferior. These qualities are essential for the old primitive relations which nature still demands and which so many conditions of modern life tend to pervert or thwart. Polarity is a vague, and affinity a discarded, and counterparts an incorrect, word, but each has some if slight designative value, though it be only provisional against the dawn of fuller knowledge.

If the husband is effeminate, not completely sexed, overstrained or strenuous on the one hand, or inactive on the other, overprone to self-indulgence, exotically pious or transmundane, cruel, weak, peppery in temper, feeble or sickly in head, thorax, loins or limbs, or if he is exacting, exiguous, severely dogmatic, too insistently about the house or too long absent, if his conduct or character causes wifely jealousy or the slightest fear of alienation of affections, or even any abatement of implicit confidence, if he does not deeply desire children and welcome the prospect of them even at the cost of self-denial and if his nature is not such as to inspire confidence so that he can practice it, if his moods are uncertain and fluctuating and he is subject to caprices, if he is prone to invading any of the privacies the wife loves and needs, does not trust her fully, meddles, is disposed to dominate where she should rule, has habits or even symptoms that cause her apprehension or physical disgust—such a man cannot be a perfect father. The body and soul of the wife constitute her an inconceivably subtle organ of registration for any and every such defect of his, deep down below her consciousness, and she cannot shield the child she is bearing from reproducing some resultants of these faults of full paternity.

The immediate effects of *masculine insufficiency* are that the wife cannot yield herself completely and with the utter resignation, not to say abandon, that her whole system needs, to his embraces and there are subliminal and perhaps automatic reservations far below her control, and these occur in both body and soul and thus even coital experiences are imperfect and that on both sides. These summital moments therefore do not normalize life as they should and their rhythm is marred. The satisfaction which ought to pervade the whole system is only partial and perhaps fragmentary. It is not led up to gradually by caresses and other prolonged tokens and

stages of progressive endearment involving all the psyche and soma. Nature decrees a long and elaborate scheme of approaches through which every advancing stage of first courtship should be recapitulated. All her many curves that lead up to this sacrament of the transmission of life ascend gradually and never abruptly. Not only must every trace and residue of aversion and even reluctance be overcome, but all inclinations of every part and faculty should converge toward the focal event. Here the will and way of woman should be supreme and till her great biological function of consent is fully and joyously exercised, the interests of posterity forbid the male to force his advances. Every element of his disposition that tends to make her violate this law, be it the nervous impetuosity that cannot wait a little for a greater good, the selfishness that can enjoy at another's expense, the defective love that can take without giving equally, or brutal aggression, impairs love and so impairs paternity. The weak, tense, neurotic man is always precipitate and this leaves the woman excited but not satisfied, never perhaps knowing what it is to come to a climax. The man thinks her cold when she is only slow and normal, while he is so sudden that he never dreams of her passionate potentialities and still less of her profound needs which he only tantalizes. The sympathetic system and the pelvic brain dominate in woman and these are very slow but very climactical in their action. In man the ingredient of volition is far greater and the cerebro-spinal centers come more prominently into function and coerce the sympathetic ganglia at more rapid tempo. Nearly all types of defective husbandhood complete this function before wifehood is fully ready and in all such cases fertilization is more or less uncertain and quasi artificial. The effects of ever inhibited connection upon woman are deleterious alike to the conjugal relations and to offspring. The germ cell is left at the door and whether it is later taken in or finds its own way to the ovum, it may be conceived of as having to pass through the stage of unnatural experiences and to have to put forth abnormal efforts to reach its goal all because the male function is incomplete.

There is now growing reason to believe that this is one cause of the unique race suicide of native-born Americans.

Where the air is so clear and ablaze with light and life and often very dry, where time is money and get-rich-quick schemes and snatched lunches accelerate the personal equation, and push and rush get there and even old age is not calm and restful but often marked by irritable weakness, it is perhaps not surprising that consciousness should encroach upon the vegetative system and sufficient time for the most important act of life be grudged or hurried through madly, as we gulp our whisky instead of sipping it at leisure like nature's gentlemen, or as we bolt our food instead of performing the full predigestive function of mastication. When even the sympathetic system of nerves normally slow in all their processes has come to act suddenly as does the cerebro-spinal system, rest may restore the balance between them and subordinate the latter which is newer and superposed to the law of the former as it should be. The reproductive act is as old as sex and for eons has been dominated by the ganglionic centers and their ancient sway and fashion cannot be invaded by the more recent cerebral modes of activity with impunity.

Besides progressive sterility another effect of this sexual neurasthenia is degeneration of the female function. Woman in her prime is almost all first the sex and then mother, if we interpret these functions as broadly and as highly as we now must. Her entire life during the reproductive age is within the inner or the outer circles of the domain of love. Everything that pertains to it has worth, value, interest, and nothing else has. It has a wide, diversified realm richly dight with incident, charged with varied emotions; but the nucleus and vital nodes of it all that give it not only unity, but reality are the few full supreme acts of love. If these are lacking, abortive or defective, her life is at best a little falsetto and unreal and there is more or less disenchantment, while the substitutes such as charity, art, and culture are sought; and denied the primal, women come to accept the second-rate choice of life. This is the case not only with the unwed but with wives whose husbands do not and cannot fully satisfy their bodies and souls. They break away from their proper sphere because man has not done his part to make them happy in it. Hunger is one great cause of migration and truancy and prompts those who suffer from it to seek other scenes, and it was because woman's

Eden was in this sense Adamless that she is now retiring from it and taking refuge beside man in his own walks of life and work. Thus, as he became more or less eviscerated, she in corresponding degree must therefore become defeminized. She accommodates herself to secondary sexual functions and magnifies these because those that are primary are denied her; and always man's counterpart, save where conscious imitation makes her like him, she became apathetic and slow in sex as he grew precipitate because she was not heated to the degree of fusion; her melting point has grown higher while his has lowered. One requires more and the other less than the normal stimulus in order to evoke the complete response. Thus physiological misfits arise perhaps in part because males respond quickest to changes in the environment such as are involved in passing from the old world of less to the new world of greater tonicity, and woman, who adjusts to such environmental new conditions more slowly, may do so in time and thus a new equilibrium be established. Teeming Asia long ago attained stable relations, Europe is transitional, and America may eventually find a new equipoise in which the brain is more than ever regnant over the vegetative function.

Husbands judge and weigh their wives when pregnant—and, indeed, on through lactation—by other standards, for the tests of motherhood are very different from those of wifehood. Here, too, *questionnaire* data have been gathered from one hundred fathers of different types. One writes: "While she had been fairly well before and seemed even better now, I feared a breakdown ere it was all over and worried at every symptom, first of all for her, but also for the child. I married for love and rather suddenly and had thought little about this as we were both young, but now I realized how nervous her family were and that one of her brothers had been dissipated and committed suicide and I had many forebodings."¹ "Three out of seven of her brothers and sisters were deaf and although she heard perfectly I dreaded lest our child should be born deaf. I remembered that she had not wanted children and feared it was from a sense of this danger." "She was so unreasonable at times that I thought of insanity and even asked

¹ Each of the following quotations is from a different father. •

incidentally if it had ever existed in any branch of her family." "She told me when in this condition that her mother had borne an abnormal child and that another was stillborn, and I saw that she was yet more weak and delicate than her mother was." "I knew there was consumption in both her family and mine and had heard that the disease was cumulative in the offspring, but I did not reflect on this beforehand, although I was warned. Now it came home to me." "I confess I was greatly grieved and disappointed that my wife could not nurse the child." "Her mother died in childbirth and I feared she would." "I realized that she had been an only child, her mother one of two, and her father one of three; and so began to fear she would be barren and when she was with child constantly expected miscarriage or that a weakling would be born." "My boys were both slender and delicate like their mother and we had a hard time rearing them." "She was slender, used to lace tight and was a good and true wife to me, but could not have a child." "My ideal always had been to have a large family like my brothers and sisters, but she was not that kind. The doctor said the trouble was with her and said it was on the wife's side about seven times out of eight, but he could suggest nothing and I grew despondent and thought of many things. She was very affectionate but I could not help thinking of divorce and sometimes it seemed my duty to our business and our name, but I did not and now it is too late." "Most of our acquaintances of our age had children, while we could not. It was very, very bitter and my affection for my wife paled a little, despite myself." "I never half appreciated my wife until I saw how easily and naturally she took to having and caring for children. She grew more beautiful, too. I never dreamed the slim young girl I married would do and be all she did and was as a mother." "Before I was the pivot about which all turned, now I was only mate and she captain, a jolly crew in the nursery. It was all luck for I thought of her in the early days of our marriage as made only for my own delectation." "She had been a girl, but when her condition was known, she seemed to grow up into a splendid woman. I am a physician and know of the many dangers that beset every stage, but she suffered not the least from any one of them. Indeed, I was a bit

mortified that I had almost nothing to do, save at the confinement itself. I talked and warned and sometimes spoke of perils. She was good enough to say nothing, but she might have ridiculed and even taunted me in her heart for my fears."

Some fathers fortunate like the last above seem to congratulate themselves smugly for their foresight in selecting such wives with an amusing and scantily veiled affectation of conceit and pose as if they would counsel young men to imitate them in the wisdom of their choice. A very few advise their sons to consider the mother of any girl they are interested in and realize that the latter will be and do about as the former was and did, to consider if the family and stock is good, if there are substantial staying domestic qualities in the blood, strength, endurance, regularity, order, and even means equal to their own, from five to ten years' difference in age, no feminist theories too deeply ingrained, no too confirmed habits of coquetry, etc.—all these in a way that suggest the breeder's stirpicultural view which is so bitterly and sometimes frantically resented by women, especially those whose deficiencies such standards suggest. This point of view has been the target of a great deal of popular ridicule. But one of the most pathetic aspects of life is seen when the young husband feels that the bride of his heart is weighed and found wanting in this supreme test to which the instinct of the most loving husband inevitably subjects her, however loyal he may remain and however tender his ministrations. Girls and their educators should ponder this critical stage in a wife's life betimes. Every normal husband reaches a period in his development sooner or later when he wants offspring and heirs, wants them supremely, and if they are lacking he is quite prone to surmise that the fault lies with the wife. Often to himself he inventories her qualities of motherhood, and this examination is conducted by very different methods and is a vastly harder one to pass than that involved in the selection of courtship. Shortcoming here is, of course, more often condoned because the love which first cemented two lives remains, and also because men can make tolerable shift to live and even be happy in that. Even if there is inner alienation, outer ties often prompt the husband to make a virtue out of his necessity and there may be an effort to make even more of what

remains of love, but it is love with renunciation of its choicest fruit. Other husbands are a little more exacting or grow slightly more formal as duty is invoked to eke out affection, or they may become a little more demonstrative outwardly to make up for waning inner spontaneity. Some husbands abandon themselves more to selfish gratification with their wives as the chance increases that such excess will not impair offspring, while others become querulous and censorious as if they had been deeply wronged and some lapse toward dejection. All this may be done while keeping up a brave show of indifference. The fact that there is a chance that it is his fault and may be considered so by his own acquaintances is profoundly mortifying to his sense of manhood and this exposure to ridicule he may charge up against his wife. As a man of the world, he fancies many things club gossips might say of him, as he has heard them talk of others. There is always at the best in aging childless couples something a little falsetto in their love, as there is a pathetic pitifulness in their condition. They have compromised with life and must put up with only the second best of it. Name and estate approach extinction. They have not been kept young by children, have not profited by them to project their own being into the future and they must die doubly, once in their own persons and again for their race or family. If poor, there are none to care for them in old age, and if rich, their accumulations must be dissipated among relatives or strangers. Such are the obvious and inevitable thoughts that begin first faintly and then more palpably to hover over the horizon of consciousness and haze the brightness of its skies when the possibility of childlessness is progressively realized and the higher dispensation of parental thought which should supervene upon that of marital love is jeopardized and lost. The husband may begin to examine his own past life and blame himself for real or fancied errors and often the whole personality of his wife, body and soul, is passed in review. He reflects upon many things that he now deeply realizes that he should have thought of before, of her relatives' pedigree; and her habits, mode of life, and regimen are gone over in quest of the cause not only of sterility, but of each and every defect during gestation and even lactation and sometimes drastic, if ignorant, prescriptions are

turged upon her, while cruder souls may even indulge in bitter reproaches. Of course there are, too, unnatural husbands who never want children but desire only personal pleasure. Poverty or even niggardliness or perhaps a sense of their own physical or mental unsoundness—each and all of these may bring men to this pass, and so may a chronic aversion to the noise, care and confusion caused by children. Some of all these appear in our *questionnaire* returns. But, as a whole, such types later will and probably should become extinct, and as they do not contribute to posterity, they will not here be discussed.

As a rule, the youngest wives are most prone to feel grief and loss when they first realize that they are to become mothers and the oldest to anticipate pain and danger. This is natural and it would seem that the satisfaction is greatest near the middle or later twenties. The general sentiment is that a longer or shorter period of wedded life should be exempt during which husband and wife can be all and all to each other. This is partly traceable to the prevalence of hyperromantic ideas of love and wedlock favored by modern novel reading, but for people maturely nubile it is doubtless a mistake not only for the best interests of posterity but for the greatest mutual happiness. Initial excess, if it does not bring immediate disenchantment and perhaps aversion, often sows the seed of it later, while the now established average inferiority of firstborn children, when it is just these who ought to inherit the full primal vigor of their parents, shows that we have wandered from nature's way. It is now practically proven that there is a postmarital decline of reproductive vigor which begins very soon after wedlock and that this is later followed by a slight rise of its curve corresponding to an ebb of excess and that this secondary increase occurs after there has been some abatement of the pace set during the first weeks or months.

In many cases the father is now for the first time critically judged and his faults realized in fear lest they appear in the child. One woman writes: "I now saw clearly that he was a scamp and felt that the child of such a man must be born a moral cripple. As a husband I thought I loved him, but as a father he appeared in a very different light. I should have

thought of this before, but I was very young (eighteen)." Another writes (condensing the substance of a long communication): "He proved to have a loathsome disease and gave it to me, so I knew beforehand the child would be tainted. The doctors told me the child might take the worst results of the disease and leave me better. I thought I ought to want it to be the other way and I take it all and let the child go scot free, but I could not. My one hope was that I might be well whatever befell the child. I had heard that infected men often hoped to relieve themselves by imparting their disease to innocent healthy women, but surely this is the very opposite of love. It is the worst and most selfish thing I can think of. Why did no one, his doctor or some one else, warn me? Is there no vengeance on earth or in heaven for such conduct?" Another says: "My husband was really too old and also too exhausted to have children. We both knew it and felt safe with our precautions, but my condition was an accident, at least he said so and I tried to believe him, but cannot escape the thought that perhaps in a moment of weakness he intended it for his greater pleasure." Another says: "I was of a nervous temperament and he still more so. Perhaps this similarity drew us together and made us personally congenial, but we thought too little of offspring at first and now I feared my child might be insane or idiotic." Another heard after she was in this condition that her husband had been dissipated before his marriage and so feared the results. Several thought now their husbands were disappointed and took less interest in them and suspected that they had consoled themselves with other women and so realized that they must face the ordeal, and life afterwards alone, for love was dead, and one asked advice as to what to do. One feared she was too old to go through it all. Her husband was young and lusty and had already begun to care less for her. Often the fear was expressed that the husband would be unable to control himself during so long a period and would turn to other loves. Judgment of the husband, point by point, and self-examination as to their own fitness of body and soul were common. Several were apprehensive of results of too much previous self-indulgence. "I wanted my husband to be now just a good faithful friend who would care for me and whom I could trust and

lean on more and more, but he did not fulfill this wish." One wanted all younger women to be made to realize just what they would feel when in this condition so that they could judge their wooers beforehand by the same standards that loomed up now. A few wanted children so ardently and so long in vain that they began to suspect themselves or their husbands of abnormality, and grew depressed or resentful and suspicious according as they thought the fault to be his or their own. Waning confidence and love flamed up again when this condition came. One ascribed all the pains and restraints of this stage to her husband. "He knew it all beforehand for he was a doctor and I an unsophisticated girl, but he deliberately let me go through it all." Another writes: "I wanted a girl because I thought his faults would be more likely to be reproduced in a boy." Sometimes when perversion is feared the coming mother finds comfort in resolving and planning how by regimen beforehand and by nurture afterwards she may correct the faults of nature. "If Weismann is right, and nothing after conception or after birth helps, it is ghastly fatalism, and we might as well give up," writes a graduate. Some review their training at home and in school, and are censorious of parents and teachers, surroundings, influences, etc., and one studied up all available data of her own and her husband's pedigree to forecast the results upon her child. All in all then, this state is a great revealer and brings in new interests, criteria, standards of judging men, women, education, and society. Woman's great function of sex selection in choosing the father of her child stands forth in a new light: "Choose as you would wish you had when in this condition," is the counsel several suggest. In savagery and among all civilized races we find traces of the idea that pregnant women have divining power and that they have new, deeper and truer insights; and all men, even though dimly, feel that now they are being intuitively examined as before a higher tribunal, and it is this that makes unworthy men shrink away and impels the best to wholesome introspection and perhaps to resolutions of betterment, more temperance next time, etc. One father confesses that now he realized his own errors in the past and tried to atone by more tender care and mapped out for himself a new sexual regimen in the future.

Primitive mothers left to themselves in this state seek to hide for protection and quiet. They crave solitude, although it is for safety rather than for mental realization. They are more helpless, and if war, conquest, or rapid flight of the tribe comes, they chiefly suffer and may be slain by their captors or even by their fellow tribesmen as an incumbrance retarding migrations. Otherwise custom may prescribe isolation and enforce many taboos of diet and regimen so that women are the victims of many a senseless superstition. But even from this they often seek escape to be free as all women should be more than at any other time. The women about them realize better than men that those now awaiting motherhood should be a law to themselves, be exempt from many wonted duties and granted privileges and immunities. This unaccustomed condition in communities where woman is still servile, she sometimes utilizes to the uttermost to impose her will and even her whims upon those about her. Often she is thought to be prophetic and a seeress. Her new liberty becomes license and her spontaneity and fecund fancy now that she is relieved of drudgery make her not only the arbiter of her own destiny but enable her to enforce her rule upon those about her, for she demands homage from all. Even if they do not care for her, she feels a sense of power and accepts for herself services which she knows are really for her child. If she lacks wisdom to guide, she revels in enforcing obedience to her caprices. This is one of the choicest prerogatives of her sex. Now for a time she is queen at least to her little circle and she gravitates by instinct to those who will obey and revere her. She delights in being the center of attraction, the object of new interest and uses every woman's resource to have her own way and assert her sway. She has immunity, too, from injury, for she is not punished and can now violate many restraints formerly imposed upon her with impunity. In the glorious day of her full-flowered maidenhood she queened it for herself, but this dominion departed when she was married and appropriated by one, but now she can assert her power again in a new way dear to her inmost heart because of the child. What are many of the traits of hysteria in those childless and unwed but a blind instinct to be again a center of interest, a problem to be studied, a mistress to be obeyed, all without paying the price of pregnancy?

The gravid woman's center of interest is transferred to new fields and almost transformed. Husband, other children, social aims and pets now become secondary. Not a few women of laboriously acquired learning and accomplishments especially state that their literature, science, learning, music, painting, etc., practically cease to exist for them and become as vanity, for their psychic stage is set for a more absorbing drama in which all these old zests become at best but lay figures. Another kind and order of knowledge now comes to have chief value and is sought from elderly women, doctors and occasionally books, and of this, alas! for our education of girls, most deplored their ignorance, some with bitterness and reproaches, for many suffered grievously for lack of elementary knowledge. There was censure for parents, friends, teachers, schools, and colleges, prudish reticence and of the church. "The Catholics are told," said a Protestant. "The poorer people of the lower classes know; but in our circle it was thought indelicate to speak of and unfashionable to understand, so that ignorance where it did not exist was sometimes feigned," said in substance a young mother of high social position. Should the training we give girls leave them such helpless novices in the duties of that period of life when the future of the race is so intimately bound up with their well-being and their regimen of body and soul? Our few score *questionnaire* returns suggest that the most educated young women are most ignorant of the things those who are to be mothers most need to know.

The attitude toward impending pain and danger is in most normal cases one of buoyance and hope. There are few or no worries partly because these are bad for the child. There is no interest in the statistics of death in child-bed or in complications or operations and little conception of the horrifying array of gynecological apparatus, surgical processes, diseases and possible abnormal processes, but generally a tranquil and almost sublime optimism or indifference and perhaps a positive desire to suffer all of it to become more complete thereby, which prompts some to refuse narcotics even in prolonged and painful labor as better because it is nature's way. Thus, there is often a calm heroism that man, who usually knows less of pain, knows little of for women often truly enjoy suffering

for those they love and may crave or seek it as something needful to their perfection. The body of the gravid mother is in a biological sense only the *nidus* of the child which grows at its expense and in some sense subordinates all its powers and functions to its own welfare, and woman's intuitions respond to this involution for the sake of the evolution of the offspring by a deep sense that her decrease, eclipse or suffering means its advancement and so she is happy in her woe. The world affords no parallel to this algedonism or rapture of agony. Weal and woe, cross and crown are not antagonistic to her, but are units underlying her life. Surgical operations half as painful or dangerous would appall her far more, but the compensation neutralizes the suffering in a way which modern æsthetics has no rubrics to explain. Even death for something dearer than life is always far closer to woman's nature than to man's, and predisposes her when final dissolution comes to think of it rather as the birth of her soul into a higher life. Hence, self-sacrifice, which is nearer the heart of her being than it is to that of man, helps to make her more religious and magnifies the patheticism with which the New Testament regards life. A religion of only rapture can never appeal to woman. It is this inveterate and universal experience of her sex that makes it sometimes actually crave abuse and cling the closer to those who maltreat her, for to be normal and happy she must have her due portion of pain and if it does not befall her, she may passionately invent misery and simulate grief. Pity is dear to her and is often made a substitute for love where this is denied. She often exaggerates her pain and possibly most of all those real and great ones connected with childbearing, but pity both kindles and revives the love of others to her. Hence, if instead of counterfeiting she conceals her distress from all, this is so opposed to her instincts that it vastly augments it.

The sensations of the first movements of the child, which constitute an important point in law and have been elaborated in folklore, give a sudden definiteness to the sensation of motherhood. A new being knocks at the door of life and now the maternal consciousness becomes pure. It sometimes brings a realization almost startling, and there is a new unique sense of subordination of the individual to the race. Some think

the foetal movements somewhat oracular, favoring certain courses of action and presence, or like the Socratic demon dissuading or deterring from others. This affects first the mother's posture and regimen and may extend to happenings in her environment and thus there is such a thing as cyemolatriy (cyema = fœtus). From the energy, frequency, and extent of these movements some mothers think the sex of the child can be determined before its birth. Some fancy they can distinguish movements of discomfort and even sleepiness and resentment from those of spontaneous activity for exercise. They may be apprehensive that long cessation or abatement of them means danger or growing weakness. Some are made nervous or even indignant as well as sleepless if movements are excessive. Becoming irritable themselves, they fear their child will be so. Now it is angry, hungry, sleepy, playful, etc. Some fancy or find that its activities and repose depend upon theirs. One mother of seven children always foretold the sex aright and selected the name in advance, two of which were based somewhat upon supposed characteristics from this trans-*parietal* acquaintance. Some even attempt caresses and fancy that they are appreciated or perhaps responded to. It is those to whom the unborn are most real that can hardly wait to hold and behold them. One evidently somewhat neurotic young mother imagined her unborn babe so unusually mature because of its activity that she thought of trying to procure a premature delivery and others have thought their nascent offspring precociously ripe and that their small size would reduce the pain of confinement. Another anticipated unusual pain thinking the child not only oversized but overdue, having miskept her time. Besides more deliberate naming, the unborn is often thought or even called orally many an endearing pet name and talked to as if it could hear and thought and felt toward as if it could respond to the psychic approaches of the mother. Most young matrons abhor, especially in the early and middle stages, every such aspect of the fœtus as is represented in text-books of embryology, which only women biologists and physicians wish to inspect or study, and even the first sight of the newborn babe may repel a mother because of its larval ugliness. Such popular imagery of the unborn as most mothers have is of more mature stages, or of babies of reduced

dimensions, or sometimes it is of little pucks, brownies, fairies, or tiny Christ children; or, in fine, as something weird or charmingly little (for every diminutive is endearing), and the place they slumber and grow in is mystic and entranced. Thus, here again we meet the same contrast between fact and fancy as is seen between the moon of science, cold, arid, and a corpse of a world prophetic of what our earth is to be, and the moon of romance, of poetry and of lovers. There is a sense in which fancy is the truest because most hygienic and optimistic. If children come from heaven, it follows that the pelvis is their halfway house to earth.

As many animals and even insects prepare often very elaborate nests for their young in advance, so the human mother instinctively, even though she be insane and idiotic, provides clothing, cradles, cribs, toilet articles, etc. No better occupation of both hands and mind is possible. The child thus slowly becomes an imaginary companion as the psychic keeps pace with the biological bifurcation of one into two personalities. Such provision for unborn children should be made rather than bought for the educational effect of so doing upon the mother, for nothing so steadies her moods and fortifies her mind and contributes to make the change from life within to that without her body a direct continuum. This experience itself contributes something to the proneness of woman to think in dialogue rather than monologue and to project her soul into the future in a practical way for those she loves. We say the animals build blindly, mechanically, prophetically for their young, yet without distinct prevision. How the stimulus from the womb starts up the nest-building activities, whether it is knowledge in the beast or instinct in man that anticipates the migration from womb to cradle and the change from physiological to psychic functional care, from feeding from the blood like an organ of the parental body to mammary nutrition, from the warmth and shelter of the pelvis to that provided by sewing, from gestation to incubation, from care of self to care of baby, is one of the most challenging and complex, yet baffling problems of genetic psychology. It is a little banal to say that, of old, certain creatures were stimulated to all kinds of at first purely aimless activities and that then certain chance arrangements happened to be more helpful

for survival than others, and that these were retained and grew apace into all the multifarious kinds of preparation, or that this latter proved so economical in conserving the life of offspring that less individuals had to be produced and nature found it advantageous to detach a certain amount of energy from the reproductive processes to the task of making prenatal provisions for postnatal needs. What is the relation between the impulse to build a nest and that in a mother to prepare a wardrobe, or how do the two differ? Each product is an extension or a proxy for the parent's body and both are perhaps equally well adapted to the purpose. For the only difference between them is consciousness. Here this latter becomes insignificant and problematical, a thing of words, theories, schools rather than of life. One may be a trifle more elaborated, but just in the degree that it is volitional or planful it becomes vacillating and uncertain. The human mother *knows* that something will bud from her body that needs shelter and protection to be prepared beforehand, and the bird or animal *feels* the same; and what distinction that has any value can a thoroughgoing pragmatism find between them? Surely here the difference between conscious and unconscious, between the psychological and biological becomes, if not a little impertinent, only of minimum worth for life and thought. Man's one real advantage is that he can profit more by imitation and by the social tradition made possible by language, but against this must be offset the diminished infallibility of his instincts.

During parturition, the husband is generally wanted. Some very young mothers experience a feeling of shame and would banish him. Some want him in the next room ready to enter if desired, while others would have him present throughout, some to hold their hands, others to assist, etc. Some are so conscious of his presence that they cover their face during the throes that he may not see the distortions caused by pain, smiling at him between times. If his composure or control is not fully trusted, he must stay away. Two doctors' wives cannot trust their husbands, one on account of his nerves and the other because she suspects his knowledge, and two are glad he can do it all and no strange professional is necessary. The selection of medical aid is usually left to him and women rarely ask that provision be made for possible exceptional

emergencies and are alarmed if he does so. If present, the husband must be passive and complaisant, and if there is the least danger that he may attempt to assert his authority or to prescribe any items of conduct to nurse, doctor, or wife, he is at once *persona non grata*. The wife's consent to have him present is no doubt partly that he may see how she suffers for him and for the child, and that this supreme object lesson of devotion and self-sacrifice, which is the noblest thing in womanhood, may not only touch his sympathy and arouse his gratitude and appreciation, but increase his love. Thus, there is an ingredient, however small, of tact and diplomacy in her desire for his presence. Whatever tenderness he was made to feel for her condition before, now reaches its maximum and his realization of what it all means may not come amiss in the future.

The first sight of the baby, especially to young and inexperienced mothers, is disappointing and several even say "disgusting." One avers that she thought she never could love "that yellow ugly bundle" and wanted it taken away. Her ideals of infantile beauty had been so romantic that she half expected to see a cherub or holy bambino with a halo as in pictures. In abnormal cases, this aversion may intensify into a hate and spite that can never be overcome and the mother may be dangerous to the child. It may require hours or days until the child can be held in the arms and nursed when touch sometimes seems to conquer sight. The vast majority of mothers in our returns, however, long for the first glimpse of their darling, are intensely happy and can hardly wait for the bath and dressing to be over to clasp it. Some say that they wish to see if it is sound and well formed and to relieve their anxiety upon this point. The first glimpse is often supremely delightful. Tininess itself constitutes an irresistible appeal and so does helplessness, and there are tears of joy, and some can hardly wait till their milk has fully come to nurse it. It is all their very own, flesh of their flesh and they have little pangs that others must even touch it. A few begrudge even a sight of it at first, but most want all their friends to see and are proud at every expression of admiration or interest. It must above all be protected and cuddled, if not dandled, and their kisses are "as delicate as a zephyr and as

rapturous as heaven itself." Only when it is resting by their side can they rest after all they have been through, and much as they need to sleep they wake at the slightest stir or sound, so intimate is now the new external *rapport*. Now they have it in the objective world where they can lavish all their care upon it directly and can do for it, and not merely diet, rest, and follow certain regimens for its indirect benefit.

The first cry is usually awaited with some anxiety, for it means life, while its absence is death. To a few very young mothers, the note seems harsh and repellent or sets the nerves aquiver like a shrilling dissonance. Some in this tense state weep because it seems to them so hoarse, uncanny or persistent and are perhaps laughed into smiling by those about the bedside. Most, however, find it rapturous and rejoice if it is loud because this betokens vigor and health. They know their labor is accomplished and that now they are indeed real mothers. Some describe their feelings as predominantly pity. "The poor little stranger will have much to suffer in this world on the shores of which it is cast like a shipwrecked mariner by angry waves." "I knew the voice and lungs were good and that was enough for me." "I thought it was in pain or wanted something and so I felt I must bestir myself, but did not know what to do." "When I first heard it cry, I sank back feeling that so far all was well." "Then I could pray with a heart full to overflowing with gratitude." "It was the sweetest sound I ever heard and I was delirious and almost hysterical with joy." "I felt it a call or summons to me to do my whole duty by it, for it needed me."

One of the first and fondest desires of a young mother's heart is to see the baby in her husband's arms. In former ages this meant that he acknowledged it to be his as well as hers, and not only in ancient Rome but in many a savage tribe it is a formal act of adoption, signifying before witnesses that the father owns his child. To most mothers now it means a new and higher bond of union, that they are now not only man and wife but joint parents. Some mothers are somewhat fastidious and exacting and want him to hold and perhaps kiss it first and then to place it in their own arms as if presenting it to them as a kind of boon for what they have suffered and accomplished in getting him an heir. It is a moment when

impressions, even of details, are indelible and our returns upon this point are minute. The husband is relieved of long, and perhaps only with difficulty concealed, anxiety for two, and if the child is lusty he has good reason to be proud of himself as well as of his wife and of the new scion of his house. He is very conscious of his new dignity and likes all his friends to know of it despite the occasional chaffing to which he may be subject. The disfavor with which female friends may have regarded him before and during the confinement is gone and he shares in their congratulations. However deeply he may sympathize with his wife, he can at first with the best good will do but little to assist in the ministrations. His visits to the nursery are welcome if rightly timed and if he deports himself properly, but he must not meddle and can only look on. The full realization of his parenthood now grows apace, but the mother's sense of hers had long antedated his.

I append in usually greatly condensed form typical cases from my collection of one hundred, showing the psychic reactions of mothers to this most tender and sacred of the experiences of maternity.

Married at twenty; written at twenty-seven; two children. For five months I had no hope and cried hours at a time; was very angry at my husband who said we were happier as it was, at least for a time without the noise and care. I said, "you are happy, but I married in order to have children and am miserable." I loved dolls as a child and was never tired of caring for my younger brothers and sisters. When I was sure I was to be a mother, I could hardly sleep at first for joy, wanted to tell a sister of seven and thought she ought to know. Mother, and especially grandmother, told me all their experience and that of all others they knew. My husband said nice things, but was unhappy that I could go out less with him and had many ideas about exercise, diet, reading, and everything. I now seemed to step out of real life, wanted more seclusion and narrowed the circle of my friends. There was some loneliness. I loved to sit in the garden with flowers or in the woods and think. I began to love the child that was to be with all my mind, might, and strength. I thought it would be a boy with golden hair, and gave him many pet names, although preferring Henry, which was that of my lost baby brother. I knew there would be pain and danger, but I loved to contemplate both because they would glorify my motherhood and make it complete. My husband's sisters had died in childbirth and my husband was anxious and afraid, but tried to conceal it. This I thought to be dislike to my condition and was much troubled by it.

I felt that I belonged entirely to my child and so wanted to live and be well. I desired my husband to love the baby no less than me and feared he would not. My life grew far richer, more complete; all my girlish much-praised beauty was gone, but I cared not. I pitied childless women more and more. Once I expressed my sympathy with a beautiful but childless society woman who replied that she could not endure the noise and disorder of children, and I have ever since felt a deep-seated dislike for her and she for me. I tried to control my moods and temper, to live ideally for the child's sake.

Married at twenty-three; written at forty; five children. There were three years of dull, dreary, lonely waiting. As soon as I knew, I first wanted my mother; loved my husband not less but differently and with a certain reserve as if there had been fulfillment and now there was nothing but harvest. I lost my sallowness and my friends said I had bloomed like a rose. I loved to sit in my room and was for the first time glad my husband had his own occupation, his friends, cards, club, so I could be by myself. He was a bit worried and sometimes scolded because my regimen was not what he thought right. I took new delight in the society of elderly women and in seeing how ardently most of them shared my gladness and how careful and full of advice they were for me. I felt I had stepped over the threshold of a nobler life, tried not to worry, was proud and always thought as I belonged to my baby now, I must do and be my best. I wanted my child to be the brightest, handsomest, happiest, healthiest ever, and his name was to be Felix. I hoped the worst qualities of my husband would not develop in my child for then I knew a wall would arise between us and I wanted to see rather all his best traits and thus only should I want more children. In fact, I grew apart from my husband and took all my comfort more and more with my children who, by dint of years of care, have so far developed well.

Married at twenty-two; written at thirty-three; two children. I rejoiced greatly and grew indifferent to all but husband and baby, but was excitable and nervous; loved my home, children, and nature more; wanted all the pain, but was weary waiting so long. Many friends became indifferent to me. My husband was wild with joy. He tried to conceal his worry on account of my delicate health, but I slowly grew stronger and felt that he would not let me die. I kept busy and took on more rather than less duties; feared my husband would love the child more than he did me; felt impelled to tell all my young women friends much that I was learning and to break through the absurd conventional restraints of false, mock modesty that they might love this state and know more about it beforehand than I did.

Married at eighteen; written at twenty-four; three children. I was young and was not glad, for I thought all my freedom was gone; I had lived and seen so little! I was so ashamed I wanted to run away from home and husband to my parents; cried much; did not want to

move but to lie on the sofa and tried not to think; hoped long that it was not true; hated company and especially strangers; wanted to be in some far and unknown place; felt sure I should die; thought little or nothing of the child at first. My married sister pitied and consoled me, but I felt it was all unjust. I was beautiful, but inexperienced; had expected great joy in getting out of the convent school into the world. My husband was twenty years older, affectionate and talked much of my duty. Why did my mother let me learn to dance and flirt only to have to leave the gay world after just a glimpse of it? God help me, I sometimes hated my dear husband and could not bear his presence in the same room at night for a moment. He preached the philosophy of maternity, how needful it was for completeness and I abhorred his doctrine, but now see he was right. I had spells of vowing I would never bear the child for him, but could think of no practical way of escape. I had many caprices, not only about foods but about him.

Married at seventeen years and six months; written at twenty-three; two children. Was distressed that I could not go to balls, theatres, parties; was cross at my husband, who was free to go about the world as usual. I wanted to run away and hide; thought a great deal about my girlhood, home, flowers, birds, shopping, singing, and everything, and every experience there kept going through my mind; thought nothing about the child; loved my old nurse, who cried with me and said I was a poor martyr; felt very forlorn; retired and rose late, doing nothing all day; liked all sour and sweet things, and feigned queer appetites for foods I never tasted, and did it out of spite or mischief; could never sleep in the dark; disliked all my old gowns, dresses, and got new ones; took occasion of the new spirit of kindness toward me to ask for various and many presents, for I knew now I would get about all I wanted. I hoped for a girl so I could dress her up beautifully and take her to balls. My chief fear was that the child would not be beautiful, for I would hate it if anything was the matter; was always at cross purposes with my husband, but all is well now.

Married at twenty-five; written at thirty-three; one child. Was happy because my husband loved me more and took great pleasure in preparing clothes and things; narrowed my circle to those nearest and dearest; could not bear the presents of anyone of whose good will and love I was not certain; wanted and prayed for a girl to be a matron and bear children for my fatherland (Poland); named her in advance Victoria, and hoped she might be a Jeanne d'Arc and free us from Russia. It was a boy. Among other things, prayed that if I died, the child might die with me, and not be an orphan; was tranquil and content, always trying to do nothing not best for it; wished I knew more; felt sure it would be a superior child and felt myself superior to other women. It was hard to adjust to conventional modesty which forbids us to talk freely and openly about all such things about which our whole life and mind centers. The

first movements were a great event which I shall never forget. I knew then it would be strong and vigorous, and so got a bit acquainted with its disposition beforehand.

Married at twenty-eight; written at thirty; one child. Glad but feared I should die, and my husband's sensitive nature constantly troubled me; feared he would not realize why I must turn away from him for rest. I looked younger and fresher in color than ever. I longed for my own room at home, and to have my child there alone. I had never known my father, and perhaps for this reason wanted my child all to myself. I gave her long in advance the name she now bears; tried to live hygienically; thought my husband very egotistic; feared my child would love me less because it must love him too. I was a pianist and taught before marriage and longed to give my daughter lessons. My husband was so disturbed as my term approached that he fell ill. He loved me too much. I feared his nerves might be inherited, and so liked him less. Possibly I took more care of myself because I knew he loved me, but I did not want him around at all.

Married at twenty-two; written at thirty; three children. Full of mingled hope, shyness, and shame; was glad I had such a nice home and room. My husband was always getting and doing things, but seemed a little conscious and almost ashamed of it, as though his tenderness were unmanly. Especially in the presence of my mother he was sometimes disagreeable, I thought, in order to hide his feelings. I believe I would rather have died than to have my child die, but I never before so wanted to live so as to care for it. It was very real to me and had many pet names. I was much interested in my own new states of mind; felt exalted above others; condemned the customs of society that prevent women from keeping their own primitive souls. The first of the manifestations of new life excited me, but the prenatal movements gave me quite an insight into the nature of the child.

Married at twenty-three; written at twenty-nine; three children. Had always greatly loved little children and was glad; was very tired of caresses, and loved to be alone more and more, and was inclined to melancholy, would go to the public garden and sit by the hour to watch children. It was to be Angelina; all must suffer, and so I was resigned and resolved not to take any narcotics, but wanted to bear all the mother's burden and should love it more for the suffering and it would love me the more for it. My sister was a spinster, and thought I should shut myself out of society, and called my condition "indecent and disgusting," and the younger sister, aged nineteen, pretended not to understand, but was red and annoyed at my presence. Later she told me and was much ashamed. My husband grew very serious and tried to pet me in new ways, but I was ungrateful. I grew ambitious to have as many children as my mother (nine), but that was foolish for me, we were so poor and all would have to work harder and we must scrimp and pinch still more. I

know, however, that our dear country needs more native-born people, and should not be so dependent for its increase upon immigrants.

Married at twenty-one; written at fifty; five children. It was with great grief that I realized that I loved my firstborn more before birth than I did for some weeks after. The first aspect disillusioned me, for I had high ideals. I have had no such experience with my later children. My first love toward the child awoke suddenly at its first movement when it came to be a reality for me. The movements often pained me, yet I loved to feel them, to caress the unborn child, and think how tenderly I would care for it after its birth. I am not sure whether painlessness at birth would be best, but of course in a way I would prefer it, though not at the expense of the child, nor would I lose harmony with the experience of all mothers or with full maternity. My husband would and wanted to lighten all my burdens, but I had to work to keep myself occupied and well. He had a look and mien of the sinner who is repentant and wanted to do penance, and this made me love him more. I felt I must smoke cigars, and in the fifth month I did, and have ever since loved cigarettes. I was so busy that I had no time to read the literature on maternity which my friends gave me and literature and art which I had loved before, no longer existed for me. My husband seemed fastidious, and later began discords about our plans for the children, which increased as they grew up and ceased only when each had developed his own way, which was in every respect different from the wishes and designs of either of us. I was full of ambition that my children should be the best in the world. Childless women seemed so stupid and inferior that I almost thought that all ought to have children *sans pèche et sans mari*, but this is absurd and wicked and perhaps it is almost an insane thought. My first experiences of wedlock were a great shock to my modesty, and so again were nature's arrangements for gestation, but I know now how beautiful all is.

Married at twenty-four; written at thirty; two children. Was simply cross at the prospect of the expense. I was very irritable, the more so that I was not understood; was very ill, hungry, and overworked; longed and pined for quiet, rest, but could get neither; wanted a girl, because it is harder to raise a son. My husband smoked in our rooms, but tobacco as well as perfumery made me sick. I just had to buy and once to steal apples to eat on the street. Pregnancy does not elevate, but it degrades and drags us down, but children must be born. I could not help feeling resentment toward my husband, and quarrels were frequent. No doubt my disposition did affect my child unfavorably.

Married at nineteen; written at twenty-four; three children. Glad, but dreaded loss of freedom; feared I did not know enough to be a good mother; had never seen much of children; was pleased that my husband revered me like a saint; often rose, sobbed hysterically about the house at night. For my first child, wanted to be out-of-doors, but for my last preferred my own room where I had loved to arrange

bright curtains, paper flowers, have sunshine, etc.; had various pets, but cared less for these now; never thought about my children before they were born. Noise, i.e., that of the town, was very distressing; shunned all strangers, abhorred milk, wine, pork, soup, and cheese, but had no cravings. "In heart, soul, thought, and endeavor, I am better and nobler and more womanly, and but for false education all true women would know that their really supreme end and aim in life was to be mothers."

Married at twenty; written at twenty-six; four children. Was a little repelled by my husband's new tenderness, which I at first did not understand. I thought my first would be a boy, and named it long in advance after a national hero. I developed a new dislike of young flirting girls, who seemed to me silly and giddy; was grateful that my husband showed no anxiety even if he felt it. I was an orphan and reveled now in the sense of more truly belonging to some one, and at the prospect of having for the first time some one to cherish and who belonged to and depended upon me. I became less egotistic, capricious, humble, devout, and realized that there are others. These months, indeed, cured many of the worst faults of my girlish disposition.

Married at twenty-one; written at twenty-three; one child; was immensely ashamed and wanted to hide; was constantly sick, unhappy, ugly in form, face, and temper. My husband, I thought, cares only for the baby and not for me. Hence, I was extremely sour. At first I felt in a nasty way that I did not own myself, but was a slave. All my husband brought to or did for me was very displeasing. I hated every allusion to my condition; felt that I was a creature kept and held for bearing children and that all that pertained and was done for me was in fact done for the child. It would be a boy, either a poet, painter, or singer; I would travel with it far away from them all. It should be mine and not theirs. "Why are we women not told of the truth? How dreadful are the first days of married life, and why does the first child come as a stranger that we do not know how to take care of? It is this that makes marriage so often a great disappointment."

Married at twenty-three; written at twenty-seven; two children. Felt that all I imagined and thought influenced the child, and so lived for it; was especially shy toward my husband, who became simply a friend; lost forever and rather suddenly all my usual gayety as a girl and became serious, fussed much with my room by way of preparation; thought of the child as my own, and called it deary, sonny, etc., in my musings and soliloquies; tried to keep well for its sake; felt less my own, and it was a sweet feeling. I read religious books and prayed much, and never felt so near to heaven and God. I hoped to be chastened and better and more fit to live and die for Jesus; thought my child whatever it is will be an "angel to me," but did not think or care so much how it would compare with others. My mother had taught me, so that I married feeling it my chief duty to

bear and train children. The more of us there are in the country, the greater the country, so that we have a holy mission. For this destiny every girl should be prepared.

Married at twenty-five; written at thirty-four; five children. Felt proud; was happiest with the later children. We are very poor, but I welcomed the added labor and care. My first child especially was a very real being to me almost from the start; was loved most, but there would be other children. I longed constantly for it to be large, sound, well built. My husband was needlessly anxious about every change of my moods. He should have been better instructed, and have allowed me to feel any way I wanted. I expected he would love the child more than me, but this made me happy, for it was ours.

Married at thirty-one; written at thirty-four; two children. After years of waiting I was inexpressibly rejoiced, though miserably ill throughout, and my husband, who had been unhappy, became far dearer and closer to me again. I loved home, garden, yet better, because all these would mean so much to my child. I would bear any pain and even die for such a prize. I felt a double responsibility and built castles for the future. I saw many beautiful pictures, and enjoyed them, too; realized how the Holy Mother felt, and my thoughts fluctuated, now fearing and now thinking that every possible excellence would come.

Married at twenty; written at forty-one; six children. As a child I always wanted and expected a baby of my own, and when, after six months of marriage, there was no sign, I thought of adopting one. My chief fears were with the first. When I knew, I wanted to tell everybody, and the joy of making and handling the garments was exquisite. During the fourth and fifth months I cried at trifles, but in the last few months was already happy, for the movements gave me an exquisite sense of companionship, and I could hardly wait to clasp it. When the later children were coming, I took the first into my confidence, and they felt the keenest yet secretly sacred pleasure of feeling it under my heart. This brought us all nearer together. I shrank from those of my friends who think this practice wrong. I wanted all things to be as natural as possible, and welcomed the pain. I did not want to die rather than the child, for there were possibilities of others. In everything I belonged to that baby, and nothing could disturb my serenity. I longed above all else to be natural. It is a kind provision of nature that childless women do not know what they miss. I could usually tell the sex by the movements.

My long doll play predisposed me to long for real children, and my study of medicine strengthened this desire, and gave me confidence, for I knew I was stronger and better in health than the average. It made me appreciate, understand, love, and turn to my mother because I could realize what she had been and done for me. I became more unselfish and realized the great law of sacrifice. I was better in health, welfare, and my habitual headaches vanished. My spirits were sky high. I did not avoid publicity, but rather courted

it, being proud of my condition, and wanting all to know it. The child was a very real personality. I had two names in advance, that of his paternal grandfather, and the other a secret pet name. I thought much about my ancestry and that of my husband, for I was interested in heredity; was more charitable and humanistic. If my husband was absorbed, I realized that he felt the added responsibility, care, and expense of what was coming. In the middle of my term, all my senses, especially smell and taste, were more acute and salivation was increased. This passed after the fourth month. I feared my husband would think I was going to love the child more than I did him. My states of mind were so new they became very interesting to me, and they seemed so far superior to those of old that I seemed to be a new personality. Conventionality prevents most from enjoying to the full, as they should, this new condition, and making it a common topic of friendly intercourse.

- Was fearful I was not capable of performing the full physiological function of molding a new life perfectly. I lived more in my affections, and wanted to widen out and not to contract my circle of acquaintance, wishing all to see and know. Save only to those who pitied me I felt that everything pertaining to my state was too sacred for words. A real personality was the chief thing, although I thought I could understand better and do more for a girl. I could be content anywhere. My husband's state of mind controlled my own more than formerly. I tried to think and feel ideally, for I loved this condition, and found it extremely interesting and pleasant, and instead of feeling resentment toward him felt more gratitude.

I turned more to my husband, and from nearly all others; was greatly depressed, and thought a great deal about suicide, and the different methods. I left off corsets, reconstructed my wearing apparel and my sleeping and eating habits, and allowed myself certain indulgences to which I did not usually feel myself privileged, and thought even my own standards might now be let down. I realized painfully that the experiences of confinement were a fatality not to be evaded, and toward the latter part my feelings were rather those of triumph and exaltation. Some of my friends have had intense aversion toward both husband and child, but this feeling usually passes away after birth.

Dr. D. H. Sherman¹ says that the pædiatrist can do far more than has usually been thought in aiding the premature infant to live. Subcutaneous fat is supplied during the last month or two of gestation so that in the premature child this is lacking and the heat radiation is very great. Moreover, it lacks power to produce heat because of its imperfectly ex-

¹ *The Premature Infant*. N. Y. Med. Jour., Aug. 5, 1905, pp. 272-276.

panded lungs, its feeble metabolism, its inability to exercise, and because the liver is changing its function of blood formation to the manufacture of bile. During the last month of pregnancy iron is being stored up in excess to prepare for the small quantity of it to be supplied in breast milk later. During the last week or two of intra-uterine life, the salts of potassium are being rapidly stored up. So the digestive ferments are less effective than in full term. Although pepsin is present in the stomach, pancreatin and perhaps trypsin are active. Great are the dangers of atelectasis, and the partially developed alveoli are badly supported. The foramen of the heart is too wide open and there is often cyanosis. Very often the infant is too weak to draw food from either breast or bottle. Premature infants seem more liable to infections, perhaps especially through the umbilicus. It is possible, however, to develop a premature child about as well as one born at the full term, although the old idea that a seven months' infant is more apt to live than an eight months' child has no basis in fact. The cautions to be observed are very many and great. It is not, however, necessary, as is so often thought, that the age of the wetnurse should be related to that of the child. By great care in feeding, bathing, regulating temperature of the incubator, children weighing three pounds or even less have developed into vigorous and healthful life.

Nearly every State has enacted stringent laws against infanticide and feticide as well as laws enforcing the father's responsibility for his illegitimate offspring. The father instinct conscious of its parental duty is forcibly expressed by the penalties provided for those who desert their families. In forty-eight out of fifty-three American States and territories, including Alaska, Porto Rico, and Hawaii, action can be brought under criminal law for desertion and nonsupport of family. In the remainder, there is (January, 1907) no legislation upon the subject. The term of imprisonment for this crime ranges from ten days to three years and the fines from ten to one hundred dollars. Desertion of children with intent to abandon them utterly is punished in twenty-six States by fines ranging from \$250 to \$1,000 and imprisonment from six months to two years.

Interesting statistics have been collected by the Charity

Organization Society of New York which show that out of 323 cases of family desertion with definite cause assignable, 100 of the men left just before or after the birth of a child. Very often the deserting father came back later to wife and children until this cause of desertion occurred again. In these cases, the conjugal was stronger than the parental feeling, or attachment to the woman as wife stronger than the feeling for the child, since the former caused him to come home again after the desertion, and the latter caused him to leave again. Such guilty fathers are absolutely lacking not only in all sense of paternal instinct but in their obligation to society. Crossing a State line should not put them out of the powers of the law.

In nearly every State and practically throughout the world legislation is wholly in the hands of men. About 13,000,000 men in the United States twenty years of age and over are fathers or about twice as many as are celibate. In forty-two States the father has a legal control of the children. This is a survival of the custom which dominated primitive folk and was legalized in Greece and in Rome where even the power of life and death was vested in him. Three States fix the age of ten, sixteen that of twelve; sixteen is a common age and two States fix it at twenty-one, but in general the age limit is fourteen. In six States there is no limit to the number of hours in which minors may be kept at work. Eleven of the States that have provided child-labor laws have not (1907) reënforced or supplemented them with the laws of compelling school attendance. In eight of our States, according to Roark, there is no age limit for the protection of children against the greed of parents and employers. But we here transcend even the larger pedagogy of sex.

CHAPTER VIII

INDUSTRIAL EDUCATION

The present fearful waste of pubescents—Very few children have intellectual interests—Industrial training in the old guilds—Arts and crafts movement—Causes of the decline of the apprentice system—Its relation to labor unions—Description of a score of new types of industrial schools—The Munich system described and criticised—Failure of manual training—A proposed substitute for it—Making of toys and simple scientific apparatus—Correlation of industrial training with race history—How the former should stimulate reading—Relations to puppet theaters—Interest in firearms, tops, kites, and airships—Vocational bureaus—Educational advantage of utility—Our system undemocratic—Stress on industrial environment—Need of a book on the leading trades—Our industrial life imperiled—Reduction of natural resources—A substitute for military training—Commercial education—Business schools and colleges—Trade, general; skilled labor, special—Education for the former—Nature study and agriculture—Industrial education of girls—Difficulties of the problem—New departures—Domestic versus trade training—The German kitchen, clothes, children, church.

NEXT to moral education, to which the last few chapters have been devoted, industrial training is by general consent the greatest and most urgent problem confronting the American people. Its dimensions, complexities, and difficulties are even greater than those most interested have yet begun to realize. The vast majority of American children now leave school near the dawn of adolescence, just when the soul is most docile and eager, and when education in all the past has begun. It is precisely this nascent and most educable period that under present conditions we fail to reach, and until we do so, our entire scheme is hollow at heart. The decay of the apprentice system, the general uselessness of boys and girls under new city conditions, the specialization of industry, the utter inadequacy of the manual training movement of the last quarter century to cope with the present situation, the fact

that the best provisions here and there made reach but an insignificant fraction of the children needing them—make a grave situation involving inestimable moral and economic waste, the realization of which now threatens to seriously abate the faith of our people in education, upon which the entire scheme of public instruction rests. Our land and our age are industrial. The prime condition of citizenship and of self-respect is the power of self-support. From all this our school system as a whole has held itself aloof. Happily, however, a great awakening has begun. Let us first consider:

The Present Tragic Wastage of Pubescents.—This most educable stage of life is now most neglected. This means decay at the very heart of our educational system, the very best test of which is what it does with that enthusiasm of youth which is nature's best gift to man. What is the situation? There are now some 18,000,000 school children in the United States. If they were placed in a compact line, giving a foot to each, Schneider¹ computes they would extend from the northeast of Maine in a solid row to the west coast of Southern California, i. e., from sea to sea on the longest diameter of the country. Those who pass through the high school would reach only across California. Some 17,000,000 drop out of school as soon as or before the law permits. Ayres² studied the enrollment of 886 cities of 8,000 population or more, based on the report of the Commissioner of Education for 1907, and finds that of 1,000 pupils entering the first grade, 462 will enter the sixth, 189 the high school, from which 152 will graduate. Thorndike³ finds that very few stop before 12, but that of 100 in the school at 9 years of age, 9 leave at twelve, 18 at 13, 23 at 14, 17 at 15, 14 at 16, 8 at 17. Most drop out from 13 to 15 feeling that the school is not vital. The Commissioner of Education reports in 1908 that the high school enrollment was 4.6 per cent of the total public and private school enrollment; that the number of

¹ Hermann Schneider. Partial Time Trade Schools. *Annals of Amer. Acad. of Pol. and Soc. Sci.*, 1900, vol. 33, pp. 50-55.

² Ayres, Leonard P. *Laggards in Our Schools*. See p. 13. N. Y., Charities Publication Committee, 1909. 236 p.

³ Thorndike, Edward L. *The Elimination of Pupils from School*. Washington, Gov't Print. Office, 1908. 63 p.

students in public universities and colleges, professional and normal schools was $\frac{1}{3}$ of 1 per cent of the total enrollment of the public school, including higher educational institutions; and that the enrollment in public and private universities, colleges, professional and normal schools was 1.5 per cent of the total enrollment of public and private schools.¹ D. E. Hawkins² estimated that in the public schools of the United States each pupil attended on the average $5\frac{1}{2}$ years of 200 days each. The average compulsory attendance found, for all states having compulsory laws, is 7.2 years of from 8 to 40 weeks each. Of the total public school population from 5 to 18, only 70 per cent are enrolled, including private schools. The average daily attendance is only about $\frac{1}{2}$ of the public school population. Another estimate is that about $\frac{1}{2}$ of the public school children of our cities leave school by or before the close of the fifth grade.

Several more special censuses confirm and illustrate the conclusion that the percentage of withdrawal is very great. Kingsbury reports for the Massachusetts Commission that 25,000 children between 14 and 16 in the state are not in school and are either idle or at work. Of these $\frac{1}{3}$ only had completed the grammar grades, $\frac{1}{4}$ had finished the seventh, and $\frac{1}{5}$ the sixth grade. Of 8,567 children entering the first grades of the Cincinnati public schools, only 447 were left at the age of 14, when the law permits them to leave. C. S. Howe, of the Case School in Cleveland, says that 80 per cent of the boys of the grammar school do not finish the eighth grade, and that most of them enter the ranks of unskilled labor, and estimates that about 1 per cent of the enrollment of the elementary schools graduate from the high school.³ Of 1,650 pupils entering the first grade of the public school in Albany, 500 reach the eighth grade and 150 the twelfth. Superintendent Bogan, of the Chicago Vocational School, states that the Board of Education found that nearly 3,300 boys between the ages of 14 and 16 were neither working nor attending school.⁴ F. A. Vanderlip says there are 10,000,000 youth from 15 to 20 in the United States, and that 7,500,000 of them are not in school, and so urges continuation schools. The educational department of the international committee of the Y. M. C. A. concludes that only about 5 per cent of the 13,000,000 young men

¹ U. S. Commissioner of Education, Report, 1908, vol. 1, p. 27.

² Report of the Syracuse Chamber of Commerce, Jan., 1908. p. 23.

³ Western Journal of Education, vol. 13, p. 266. See also E. E. Brown: *Government by Influence*. N. Y., Longmans, 1910. 245 p. See p. 158 *et seq.*

⁴ Western Journal of Education, vol. 13, p. 266.

of the country from 21 to 35 had received in school any preparation for their occupation; that only about 8 per cent of those who graduated from the elementary schools entered the professions or commercial life, while most of the remaining 92 per cent took up some form of industry for a living. In England over 2,000,000, and in Massachusetts over 40,000 between the ages of 12 and 17 have no educational care.¹ The boy who goes to work attends school on the average 5 years, while those who enter the professions spend from 16 to 20 years in preparation. Our public schools give great attention to the 2,000,000 professional people, and none worthy the name to the 30,000,000 people engaged in industrial pursuits.² It is believed that about 4,000,000 young people now leave school in this country to enter industry each year with no preparation for their work. More do so in textile than in commercial centers. J. W. Van Cleave (President of the National Association of Manufacturers) estimates, as to the general distribution of occupations, that of the breadwinners of the United States, 36 per cent are in agriculture and fisheries, 24 per cent in manufacturing and mining, 16 per cent in trade and commerce, and 4 per cent in the professions and the public service. Another estimate is that of those who work for pay in this country: 85 per cent are in industry and commerce, and our schools give practical preparation for about 3.5 per cent. In 1895 it was calculated that only about 1 in 60 entering these employments receives anything like adequate vocational training. E. S. Barney³ estimates that in New York City about 37 per cent of the adult male population are engaged in mechanical work, 37 per cent in business, 91 per cent in domestic service, and 5 per cent in the learned professions.

Such statistics based on data computed by various methods, and more that could be cited, reveal the general situation. We must face these facts and draw the lessons which they teach. They are:

First, that we have paid relatively vastly too much attention to the few who go on to secondary and higher technical, liberal and professional education, and have wastefully, not to say disgracefully, neglected the needs of the masses of our children and youth. If we have a good ladder up which the child of the gutter or of the Ghetto can climb to the university, our system is nevertheless radically undemocratic, in that

¹ Sadler, M. E. *Eng. Educational Review*, Feb., 1905.

² Herter, S. L. *Carpentry and Building*, vol. 30, p. 94. See also O. I. Woodley. *Industrial Education*. N. E. A. Report, 1909, pp. 312-316.

³ Barney, E. S. *Intermediate Industrial Schools as a Requirement of a Program of Industrial Education*. N. E. A. Report, 1908, pp. 793-798.

we give too exclusive care to those on the upper rungs and are so indifferent to the great majority who would drop off from the lower ones. There is a chasm between our educational and our industrial system. J. F. McGlory (President of the Consolidated Car Heating Company of Albany) found that of 102 workmen, many of whom were mechanics of high intelligence, not one had attended the high school, and only about 7 per cent had completed the grammar school. Other manufacturers whom he consulted reported that they thought these statistics about right for their employees. Thus the high school does not reach even the skilled laborers.

Second, the grades are too archaic and traditionally oblivious of modern life. They stand under the dominion of the past, and are isolated from present, practical conditions, inadequate to our civilization, enmeshed in effete theories of general culture, and there is need of a great awakening. They are unmindful of the era of radical reconstruction that impends. Our educational leaders discourse learnedly of theories of interest, but have allowed the schools under their charge to lose, if not to kill, the interest of boys in the dawning teens. This loss is nothing less than tragic. The causes of this withdrawal are not flattering. In this country the interests of children dominate; parental authority is usually weak or not exercised; while compulsory laws, where they exist, are ineffective. We have neglected to study the most vital thing in the situation, namely, the zests of the young. The Massachusetts Commission found that of 3,157 families, most could afford to send their children to school from 14 to 16, and would have done so had the education been likely to be of use, and under virile, practical men. The boys left school because *they* wanted to, and not because their parents wished them to do so, and often against their desires. Sixty-three per cent of the boys declared they would have gone to a trade school, and 55 per cent of the parents would have sent them.

Third, we have not taken account of the nature of the great upheaval at the dawn of the teens, which marks the pubescent ferment, and which requires distinct change in matter and method of education. This instinct is far stronger and has more very ostensive outcrops than in any other age,

and land, and it is less controlled by the authority of the school or the home. It is a period of very rapid, if not fulminating, psychic expansion. It is the natal hour of new curiosities, when adult life first begins to exert its potent charm. It is an age of exploration, of great susceptibility, plasticity, eagerness, pervaded by the instinct to try and plan in many different directions. An important factor is found in the significant circumstance that a very large proportion of American parents are discontented with their own vocations and do not care for their children to follow in their own footsteps, so that their offspring, as a rule, pass through a period lasting some years of wasteful tension, trial, and error. They drift and finally settle to a calling with little complacency, and one perhaps for which they are not only ill-adapted by training but unfitted by their nature—an evil which vocation bureaus might do much to remedy. One careful study shows that even skilled workmen here often distinctly do not wish their children to follow their own trade. The lesson of the many immigrants, like the Irish, who have developed from the lowest to the highest industries, rather suggests certain advantages in this unsettlement. The Massachusetts Child Labor Committee studied the choice of vocation of 300 adults and found that less than 5 per cent of them were satisfied with their calling. A. C. Thompson, of Auburn, N. Y., asked 467 pupils what vocation they had planned and noted their choice, and 11 years later found that only 5 per cent of the 406 of them he could reach were following the calling they proposed. Thus an early choice of vocation, which is now often advocated in the interests of vocational efficiency, seems to be more or less opposed to American ideas.

But the boy who leaves school early has a hard time. The maximal age limit for compulsory school attendance is usually 14, and employers of skilled labor will rarely take boys or girls under 16 or 18. Those from 14 to 16 who have finished the seventh grade are rarely wanted as apprentices and have to wait from 1 to 4 years and take whatever comes. Hence they enter unskilled occupations with poor pay, often very unsanitary conditions, and perhaps night work, so that these years are often wasted if not worse. It is in fact very difficult to go from a low, unskilled into a skilled industry and few achieve it. Unsteadiness of employment is the rule. The girls, who usually leave school to dress better, and boys, who do

so because their chums do, or to earn money, are often subjected to grievous disappointment. The work they do affords little opportunity for development. The Massachusetts Labor Commission interviewed 2,000 boys who had attended public school in 1879. Of these 855 stated that they would have remained in school had it taught them a trade. Only 36 thought their school had fitted them for any definite line of work. Of the total number, 458 were receiving an average wage of about \$4 per week and 258 less than \$7 per week. In Manhattan 1,000 children from 14 to 16 secured employment certificates. Out of 603 traced, 489 were at work and 56 were doing some studying, while the others were idle or engaged in juvenile employments or unskilled labor. Two hundred and ninety-six of the 319 New York parents of these children favored industrial education. The superintendent of Cincinnati schools issued employment certificates to 195 school children, of whom 137 were 14, and 59 were 15. During the first 22 days of June, 1908, of this total, 55 secured employment in shoe and box factories, clothing stores, messenger service, bakeries, and laundries. The majority of these boys had not finished the sixth grade. Another line of inquiry shows that it is not the low-grade foreigners who are most prone to take their children from the schools. Another census of young wage-earners shows that 55 per cent were errand, messenger, and office boys, 45 per cent entered mills; of the girls, 28 per cent became cash, errand, and candy girls, and 72 per cent entered mills. Thirty-three per cent of these boys and girls entered unskilled and 65 per cent low-grade industries, and only 2 per cent skilled. Far less girls than boys undertook skilled labor. The wages of cash girls before the age of 17 are usually from \$5 to \$9 a week. They usually reach the height of their earning power before 20 with an income of from \$8 to \$10, which they will never exceed.¹ The Lewis Institute of Chicago lately advertised for boys from 16 to 18 to take their coöperative course, one week in the shop and the next in the school. One advertisement brought 60 boys.

The above facts show what it is very hard for pedagogues to realize, viz., that very few children have any real intellectual interests. Intellectual interests are very subordinate with most. Very few have taste or ability for learning. Most boys are in school to get something out of it. Most never have, can, or will care at all for culture or know what it means. The stock school studies do not appeal to but often bore them. The drill to which they have been subjected before pubescence becomes irksome when they reach this crisis.

¹ Kingsbury, S. M. *What is Ahead for the Untrained Child in Industry?* *Chauties*, 1907, vol. 19, pp. 808-813.

They are impatient of books, which seem to them to hide life. So strong is their aversion to school that parents, teachers, and the law combined do not keep them there. There is a sad misfit here. We fail to adapt the boy to the school or the school to the boy. Again, there always ought to be a rather exact correlation between the age limits of compulsory attendance and the lower age limit of admission to the local industries. In fact, many who leave for work cannot find it, because employers can obtain all the crude help they want from older boys for the same pay. Of 354 employers asked, 250 objected to employing children under 16, and 228 did not believe children were of much value in industry, although 320 of them favored trade training. Hence, those who are unsuccessful are not only idle but peculiarly exposed to bad influences, liable to form bad habits, grow wild, may become a menace to society and a nuisance to themselves, their parents, and the neighbors in their community. At the most susceptible age of life, when more than at any other they need—and in all ages and lands before have had—the most training and attention (because the history of education from primitive races up shows that it always begins here and extends up toward the university and down toward the kindergarten as civilization advances) they are tossed out upon the world and now thrown into the city street. The condition of these boys is pitiable in the extreme as well as dangerous. They wish to do and earn something, but every door is shut in their faces. Their schooling does not prove of aid to them, so they naturally query what good more schooling would do. These unappropriated, useless boys often group together in gangs and a few of them become criminal. They are disappointed, restless, irregular in their habits. Those who have been in school a little longer find themselves often surpassed by those who left earlier. Those who find employment must often put up with odd jobs and small pay, and so, as one special study shows, boys who find employment under 16 change from two to seven times a year. Gradually, as the years pass, they earn a living wage in some employment they never dreamed of entering, and, although the pay is small, they have settled into the rut just enough so that they cannot afford to change, for to begin another line would involve at

least temporary loss. Thus many slowly settle into unskilled laborers, but with the worm of regret and disquiet gnawing at their hearts and perhaps with a subtle feeling that things are wrong, so that they are ready on any occasion to join the ranks of the discontented after years of hoping for something that never came.

It has been estimated that boys and girls from 14 to 16 who enter unskilled industries reach their maximum earning capacity at the age of 18 or 19. Those who attend school till 16 or 18, although they have little skill or intelligence, are more likely to secure mercantile positions and, if they take technical courses, progress more rapidly, although this is largely due, not to what they have learned in school, but to greater physical and mental maturity. The Massachusetts Commission says summarily: "For the purpose of training for efficiency in productive employments, these added years which they spend in school are to a considerable extent lost years." It is passive rather than active power and ability to render service that the schools develop. School children by no means get equal opportunities to make the most of themselves in our schools as at present constituted, because they chiefly regard the few who go on instead of the many who drop off.

Nevertheless, we have many estimates often set forth in graphic figures by partisans of industrial education and especially by institutions, calculated to show parents and pupils the pecuniary advantages of staying in school. The United States Commissioner of Labor says that a common school education increases a man's wage-earning power 50 per cent, a high-school training 100 per cent, and college training 200 per cent. C. F. Perry, director of the public trade school in Milwaukee, figures the value of a trade school education something as follows: a 14-year-old boy is worth \$4 a week or \$200 a year, which equals a 5 per cent income on \$4,000. A trade school, we are told, will take the boy at this age, and in two years make him worth \$15 a week or \$800 a year, which equals 5 per cent on \$16,000—a fourfold augmentation in two years. It is a somewhat suspicious circumstance that, if we compare the collection of money value estimates of education, they show great diversities of method and re-

sult, and that they have hitherto been used chiefly as appeals to young people to go to college and other higher institutions. The economic value of trade training is undoubtedly very great, but it is not yet comprehensively made out in statistical form, although the pure culturist in education scorns this very point of view because he insists that the highest value of education is not counted in dollars and cents. It is, nevertheless, of the greatest significance not only for national efficiency generally, but also for the peace of mind and prosperity of all kinds of toilers.

After this period of years of unsettlement, change, anxiety, youth in the later teens and the early twenties often come to appreciate the value of special training and are disposed to set apart time and some of their earnings to make up past loss and to better their condition in the future. They turn to evening, and perhaps in this country rather more often to correspondence, schools. This work, however helpful it may be in many cases, is always undertaken under grievous disadvantages. One authority states that a large number of those seeking these courses are not proficient in the fundamental rules of arithmetic. The best courses on paper, some of which are well and some very inadequately worked out, lack two vital things: first, the personal touch, guidance, and inspiration of the teacher, which letters, under the best conditions, cannot make good; and, second, the material or laboratory element. No educational announcements are more alluring. Probably no institutions are resorted to by a class of young people so thoroughly in earnest to increase their knowledge and better their position. It is commendable to the spirit of our country that these young men wish to rise; but it is not creditable to the leading educational states and cities where they live and were brought up that they must seek what they want so late and so far away. Vast numbers begin but few complete the best of these courses. In 1898 the International Correspondence School at Scranton had an enrollment of 80,000; but this has now increased to more than 100,000 per annum. On November 12, 1906, it numbered 940,000 students. In June, 1907, 12,143 had finished their course and were granted certificates, and the school now grants annually about 2,700 diplomas, a number which nearly equals those

given by all the engineering and technical colleges in the country. Over 80 per cent of some 300,000 students of the correspondence school did not know fractions when they began. The American Correspondence School of Chicago has probably about 10,000 enrolled. Over 70,000 in the State of Ohio are taking correspondence courses and have paid in tuition nearly \$5,000,000.¹ It is estimated that about 55,000 in Massachusetts, with all its higher educational institutions, are taking correspondence courses and have paid in tuition nearly \$2,200,000, assuming each to have paid \$50. This amount at interest at 4 per cent would yield \$88,000, and if distributed among the 28 industrial centers of the state would give each \$3,100, which might pay instruction for 300 students in technical and commercial courses in each city. C. R. Mann² estimates that more people are taking correspondence courses in this country than are enrolled in all secondary and higher institutions. In England there are about 12,000 adult schools. France, where compulsory attendance ends at 13, has 1,000,000 continuation pupils, 52,000 courses, 40,000 popular libraries, 110,000 lectures attended by 3,000,000 people.

The pedagogy of industrial education is best begun by a glance at the *medieval gilds*, in which labor attained a more ideal organization than ever before or since. Taken at their best, they represent the world's golden age of artisanship and ought to be studied by modern labor leaders somewhat as literary men study the great mythopœic cycles in Homer, the Arthuriad, the Niebelungenlied, etc. Their relation to labor may be not entirely without aptness compared with that of the Apostolic Age to contemporary Christianity. Strange to say, although their influence is still so potent in England and western Europe, their history, which almost began with Brentano's brilliant sketch,³ is very imperfectly known, the original records having sometimes been withheld despite orders of the courts (for some of them involve present business interests) while the original records, when accessible, are voluminous and hard to decipher. In London alone no less than 111 of these were listed in

¹ MacGruder. Present Status of Technical Education in Ohio. State Bulletin.

² Mann, C. R. Industrial and Technical Training in the Secondary Schools and its Bearing on College-entrance Requirements. School Review, 1908, vol. 16, pp. 425-438.

³ Brentano, Lujo. On the History and Development of Gilds and the Origin of Trade-unions. (In J. T. Smith, English Gilds. London, Trübner, 1870. Preface, pp. 49-199.)

1422.¹ There were gilds of judges, doctors, bankers, tailors, spinners, bookbinders, builders, weavers, upholsterers, poulterers, hatters, dyers, armorers, vintners, pewterers, ropers, tapestrers, cordwainers, haberdashers, mongers or venders of fish, cheese, corn, wood, wine, oil, soap, as well as manufacturers and dealers in goods of silk, wool, skin, net makers, glovers, merchant tailors, etc. These corporations, societies, or unions sometimes erected halls, almost a score of which, some recent and imposing, exist in London to-day. The gilds differed very widely in power, size, and mode of organization. Some had many aspects of a secret society like the Masons; some had their greater and their lesser mysteries, perhaps their initiations. Very common were the stages of apprentice, journeyman and master, the latter producing his masterpiece, somewhat as a baccalaureate to-day does a thesis, after 7 years of apprenticeship. Skill in workmanship was the most precious possession of members of the crafts' gilds. They had we know not how much to do with the rearing of the great cathedrals; and the earliest universities, especially those of Paris and Bologna, were at first only gilds of scholars and masters. Their codes sought to maintain high standards of honor and excellence in arts and crafts as well as in trade. Some had their own churches or chapels; and there were many mutual help features in case of illness or death. Some were dominant factors in the development of municipalities. Some controlled the exchange, markets, held elections, were fraternal and republican, and held penalizing, forestalling and all such practices unworthy of a true trade or crafts man. Some became very rich and their captains of industry led lives of luxury of which they were ostentatious. Some endowed schools; they often instituted miracle plays, held exhibitions and fairs for the display of their products, devised many pageants and gorgeous processions. To turn out inferior work was disloyalty, and the best codes distinctly tended to make an aristocracy of expert craftsmanship, to foster pride in the product, and to crown virtuosity wherever it appeared. Gilds levied taxes

¹ Unwin, George. *The Gilds and Companies of London*. London, Methuen, 1908. 397 p. See also Edgcombe Staley: *The Gilds of Florence* (London, Methuen, 1906. 622 p.), in which he divides those that existed there into 9 great, 4 intermediate, and 9 minor gilds. Also A. Milnes: *From Gild to Factory*. London, Finch, 1904. 83 p. Also J. Toulmin Smith: *English Gilds, the Original Ordinances of more than One Hundred Early English Gilds as they Existed in the Year 1389*. London, Trübner, 1870. 483 p. Also P. Brisson: *Histoire du Travail et des Travailleurs*. Paris, Delagrave, 1906. 538 p.

The monasteries of the eighth and ninth centuries always strove to get the best craftsmen, and so did the feudal lords. To pass off spurious or defective work often cost the workman his hand or ear. Every father had to teach his son all the secrets of the trade and journeymen must travel for three years in different lands. In Germany there still must often be an examination before three masters of the trade, a professor of chemistry and physics, and a school-teacher, together with a work—drawings and all—made by the candidate.

on their members, sometimes constructed great public works, sent out trading expeditions by land and sea, etc., etc.

Now the fascinating feature about the arts and crafts movement of to-day is seen from a culture-history even more than from an educational point of view. It is that it belongs to a group of movements, great and small, which have been motivated by harking back to an earlier stage of culture or picking up a lost chord. Here belong, e. g., the revival of interest among the ancient Hebrews under Ezra in their own Scriptures when they returned from captivity to rebuild Zion and listened all day to the story of how Jahve had dealt with their forefathers of old; the Renaissance, when classical antiquity and its ideals inspired Europe; Protestantism so far as its slogan was "Back to the Scriptures"; the revival of sacramentalism and Catholicism under Pusey and Newman; and in a smaller way the enthusiasm with which many primitive races and even civilized nations have revived ancient national dances (see Chapter II), customs, pageants, processions, etc. And so the arts and crafts cult of to-day is a to be sure rather feeble effort to revive and transfigure mediævalism in industry, also involving transformations of social ideals supposed to be germane to the gild spirit. In a sense, the movement originated in Sir Walter Scott's defiance of effete classical art and his preference for the Gothic; the pre-Raphaelite revolt against the alien classical element which Sir Joshua Reynolds introduced made its contribution; and also Carlyle's sonorous and impressive phrases concerning the dignity of work, and his glorification of great men as those who can do rather than know, talk or write. He said: "Our terrestrial planet, nine tenths of which is vacant or tenanted by nomads, is still crying, 'Come and till me, come and reap me.'" This cry falls on deaf ears in the slums, because the desire for companionship overpowers all others.

One may well stand aghast at the following words of John Stuart Mill: "It is doubtful whether the use of machinery has yet lightened the day's toil of a single human being," although we call them labor-saving devices. If they relieve great efforts and the fundamental muscles, they often lay greater burdens upon the finer movements, the nervous system, and restrict liberty, and are especially fateful for individuality. The cult of utility has driven out that of beauty and man has lost pleasure in his work. Instead of healthful merriment, he is herded in great penlike workshops and is deficient even in the primal conditions of life: light, air, water, food. No contrast can be greater than that of the factory system, where man becomes a slave of his machine and often its victim with almost crushing monotony and sameness of work, and the spirit of Hans Sachs, the poet cobbler in old Nuremberg, or the condition of industry and trade at the end of the thirteenth century where Valera describes 21 guilds with 7 of them chief. They were perhaps the most potent influence of their day. Ruskin's writings have for fifty years been codified on a vast variety of topics and many have

admired him to an unreasonable degree, which seems to silence their critical faculty and makes them mistake religious and social rhapsody for art criticism. In the day of great scientific men, Ruskin dared to assert the right of sentiments in the world which, despite some of his sayings to the contrary, were more or less antagonistic to science. He gloried in inconsistencies and moods, would utterly destroy most railways, tear down and rebuild the Houses of Parliament, the National Gallery, East London; destroy and rebuild Edinburgh and New York, etc., in a way that doubtless suggested Patrick Geddes's elaborate volume planning for the expenditure of millions in reconstructing the ruins and rebuilding the town of Dunfermline, Carnegie's birthplace, which even his commission, which is doing perhaps more than was ever done in the way of reconstruction for any modern town, regarded with consternation for its radical idealism. At Coniston, in England's lake region, Ruskin devised an engineering scheme to reclaim land and attract labor. He taught drawing at evening classes to working men, lectured to audiences crowded to the door, resigned his place at the University because it refused to buy Turner's picture, "The Crook of Lune," sanctioned vivisection, endowed a masterpiece for the art school at Oxford, inherited £175,000, and died almost poor; founded St. George's Gild to effect a return to primitive agriculture where modern machines and manufacturing factories were banished, and the vows of the inmates inculcated reverence to God, honor, obedience, economy, industry, and was frenzied because it failed; and wrote his immortal works. Yet he never wrote a line that was coarse, frivolous, or designed to win either money or popularity. He pilloried what he called the "School of Cram" and resisted extreme specialization, which he thought incompatible with culture. "Great nations write their biographies in three manuscripts: the book of their words, the book of their deeds, and the book of their art. Not one of these books can be understood unless we read the other two; but of the three the only one altogether trustworthy is the last." Holman Hunt, Millais, Maddox Brown, wrote in this spirit; and the pre-Raphaelite revolt "with simpering faces, brown cows, the same white sails in the squalls and the same slices of lemon in the saucers" at any rate marked the violence of the insurrection against the alien classical element which Sir Joshua Reynolds had introduced. This is not the place to write the history of this movement or to more than refer to one or two of the literary products which it inspired, such as Sir Walter Besant's "All Sorts and Conditions of Men," which resulted in the People's Palace; Bradley Gilman's "Back to the Soil," a typical chapter in which is "The Lesson Drawn from a Pie," which is a circle city consisting of farms with dwellings near the apex of each wedge, raying out into first flowers, then market gardens, then mow land, and farthest out tillage and forest, with park, church, clubs, schools, department stores, near the center; "The Land of Decay," by René Bazin, which shows how the French peasantry had degenerated under

modern industry, describing the gradual decay of the typical family, member by member, a decay that was also physiological, moral, and religious, although with a glimpse of hope in the one best woman left of an old family who gives herself to a vigorous poor man, the husband of her choice, in order to try to regenerate the stock.

William Morris, a student of Chaucer, author of the "Earthly Paradise," the modern skald who told the great story of the north which "should be for all our race what the tale of Troy was to the Greeks," was himself skilled in the technic of half a dozen trades, and was an artist socialist, urging that "all men should have work to do which should be worth doing and pleasant." In 1852 he entered Oxford and came in contact with Burne-Jones. As a young man he thought of founding a religious brotherhood whose patron should be Sir Galahad. His ideal was a commonwealth where there should be neither rich nor poor, idle nor overworked, master nor master's man, and he was driven to the view that revolution was the only hope. In 1859 he planned his famous Red House, prototype of the Queen Anne style, for his lovely bride. Later he founded the firm of Morris & Company for ecclesiastical decoration at the time of the æsthetic revival among London churches, and pilgrimages are yet made to the windows he built from 1860 to 1870. Growing interested in weaving and dyeing, which he studied in his own vats, he devised a system of colors with very frank hues before the aniline dyes, and criticised the Gobelin factories as degrading fine art to a mere upholsterer's toy. In his study for revival he set up a hand loom in his own bedroom and became an expert workman. Then came the Kelmscott Press, in 1890, from which after careful study of the great mediæval printers and binders, Elzevir, Aldus, Plantins, and Estiennes, its chief masterpiece, Chaucer, appeared in 1896, the result of a year and nine months' work. The true workman, he held, must have a bent so strong that no education can force him from it. The creation of beauty should be to him as necessary as his daily bread. He lectured all over the kingdom, joined the Socialistic League to promote "revolutionary international socialism," marched in processions, edited the "Common Weal." His "company" was composed entirely of artists, students, and literary men, and the aim was to produce objects demanding the highest originality of conception and skill down to tables, cupboards, settles, andirons, candlesticks and table glass. Tradesmen resented his intrusion into their sphere. He studied worsted work, crewels, and designed serges and chintzes for mural decoration, as well as carpets and wall paper.

Cobden-Sanderson at the age of forty dropped his barrister's wig and gown for the beretta and blouse of a workman, and established the Doves Bindery in London, and became the apostle and prophet of labor wedded to art and intelligence. His concern expressed a social conviction, for all share profits and his disciples call him "the first citizen of Altruria." Not only is manual labor held to dignity

existence, but the maxim here is not to succeed, but to excel. In working on the book beautiful in beaten leather or crushed Levant to which each worker's name is attached, the workshop becomes not merely a place to make a living, but a place of the greatest pleasure and honor. Illumination, tooling, printing on vellum or full white pigskin, and incidental carving, chipping, upholstery and cabinet making in fumed oak, driftwood, pyrography, burned wood, etc., are now undertaken by the best representatives of the crafts movement on the principle that, if the work is in the man, the man puts himself into his work.

The influence of this movement has spread far and in many directions. The weaving and tapestry house of Haslemere near the home of Tennyson, George Eliot, and Tyndall, is one type, with its picturesque and mediæval stone cottages and half-timber houses with overhanging stories, where about 1894 Joseph King started weaving and other industries that the village girls might not drift to London. The two workshops of two stories each were designed by a well-known artist; and there are daily visitors to see the rare linen and cotton fabrics, all of which are hand-woven and sometimes hand-spun, or the chests, presses, wheels, reels, and looms rich in color. Woolen rugs, peasant tapestry, linen appliqué for wall hangings and ceremonial usages are made, and on the wall are Blount's fine designs in gesso, with hand-made pottery on shelves. The same workmen continue, year after year, happy, natural, self-supporting. The founder held that the redemption of art must come from the workers who with loving touch decorate things useful for every day. To be sure, the real originalities are rare, few and far between. It is impossible to enumerate the many lesser movements which have their inspiration here: e. g., the Evelyn Nordhoff hand bindery at Syracuse; Douglas Volk's colony at Lovell, Me., where carding, spinning, weaving, and rug work are done, the Deerfield revival of old Puritan home industries; the Busck studio for hammered copper, brass, and tooled leather which is intended to bring design and production together, whether in building a house or reviving some lost art like that of the Abnakee rugs, or fine enamel work now taught at Boston and the Pratt Institute, or the discovery by the Tiffanys of the glass workman's processes as shown by the excavations of Herculaneum and Pompeii. Cathedrals claim their enthusiasts, one of whom calls them "joint products of God and the artists." While the high place of music, painting, poetry, and sculpture is by no means disparaged, it is urged that these are not the only lost arts that have been restored, or those that are remote, unfamiliar, and now insufficiently cultivated, but burned wood and leather, mosaic, silver and gold smithing, should have just as high a place. Elbert Hubbard began his work at East Aurora in the same spirit in the Roycroft or King Craft Shop. This is a small country place and the work started with printing, then bookbinding and some illuminating; terra cotta, stone work and modeling have been tried. Here some

300 men and women, old and young, not excluding a few who were rescued from criminal careers, have been given opportunities to redeem their lives. There is profit-sharing, a piano in the workroom, social gatherings, concerts, lectures, and dances. The first building to be put up was of cobblestones, brought by the townsfolk at one dollar a load. *The Philistine* is its well-known organ, and its opinions are certainly unique, reeking with individuality and with rollicking independence. Douglas Cockerell,¹ who learned his craft under Sanderson, has published a fascinating volume calculated to make everyone desire to drop everything else and become a book-binder.

In his famous oration on the lost arts,² Wendell Phillips sought to modify our Fourth of July spirit by urging that in art the really great masters are all dead and that no modern compares with Homer, Phidias, Raphael, and Shakespeare. He quotes Dunlop, who says that in all nations there are only about 250 to 300 distinct stories. He names even many well-known jokes that he is able to trace back for centuries, some of them to classical antiquity; tells us that in Pompeii we find ground, colored, and common window glass; that the Chinese had a colorless glass which, when filled with a colorless fluid, seemed to be full of fish; that a Roman in the day of St. Paul had a glass cup which, when dashed to the pavement and dented, could be hammered into shape; that besides this malleable glass there was another specimen which, hung up by one end, would dwindle to a thread and become as flexible as wool; in Rome they made a solid bit of glass in the center of which was a colored drop which must have been poured into it, which was as large as a pea, finely mottled with shifting hues; the vase of Genoa was a solid emerald, said to have been the Queen of Sheba's gift to Solomon and used by our Savior at the Last Supper, and which Napoleon brought to France; Cicero said he saw the entire *Iliad* written on a skin rolled to the compass of a nut shell; could this have been photography? Nero had a ring with a gem which he used as an opera glass; Bunsen tells of a signet ring from Cheops so finely engraved that the inscription is invisible except with a strong glass; Phillips knew a man who had a ring with a stone three fourths of an inch in diameter with the naked figure of Hercules, in which with glasses you could tell every muscle and count the hairs on the eyebrows, which must have been made with a magnifying glass; the old Tyrian colors are so permanent that they flame up now when unearthed; a Cashmere shawl worth \$30,000 is described, with 300 distinct hues and colors which the best dyers in Europe can hardly distinguish. When the English plundered the Summer Palace of the Emperor of China, they found wrought metal vases of many kinds far beyond European skill; the

* ¹ Book Binding and the Care of Books. Lond., Hogg, 1901. 342 p.

² Bost., 1888.

Damascus blades of the Crusaders, though not gilded, are as bright as they were eight centuries ago; there was one at the London exhibition, "the point of which could be made to touch the hilt" and which could be put into its scabbard like a corkscrew; the London watchmakers found the best steel, not in Sheffield, but in the Punjab; the first needle made in England was by a negro in the time of Henry VIII, and when he died his art died with him; the first African travelers found a tribe in the interior who gave them better razors than they knew. Walter Scott describes Richard Cœur de Lion as severing a bar of iron, whereupon Saladin took an eider-down pillow and cut it in two with his sword, and then threw up the lightest scarf in the air and severed it before it descended; a Hindoo in Calcutta threw a handful of floss silk into the air and cut it in several pieces before it touched the ground; it was thought a triumph in the sixteenth century to have set up the obelisk in Rome on one end, yet the Egyptians quarried it and carried it 150 miles; the capital of Pompey's pillar is 100 feet high and weighs 2,000 pounds. Arago thinks that the railroad dates back to Egypt, and that the Egyptians knew steam; the Duchess of Burgundy took a necklace from a mummy and wore it to a ball in the Tuileries and everyone marveled; a Hindoo princess was sent home from court by her father because she was not decently covered, but she said, "Father, I have seven muslin suits on"¹

The true craftsman should always have in mind the praise and blame not of the masses but of the master. This ought not to be hard when one is young and able to see the good in everything. Plant forms, wings of birds, butterflies, and hedgerows can be sources of suggestive inspiration and motives of design. Craftsmen must fight against dreary monotony in both conception and execution. Psychology cannot explain the strange deep satisfaction that is caused by, e. g., a copper coal-hod hammered into artistic form, a candlestick, jug, key, screen, andirons, lampshade, brooch, pendant, setting for a precious stone, enamel work, tile panel, designs in wood, bookbinding or any kind of surface or relief that expresses

¹ It should be mentioned that the more artistic lines of development which also motivated the arts and crafts movement were, strangely enough, given a curious set-back by the allegiance of Oscar Wilde and the caricature of the affectations of this movement by the Gilbert-Sullivan opera "Patience," which ridiculed its symbolism as not genuine. The stained glass attitudes in which the dragoons twist themselves, the contortions of the soulful maidens in the chorus with their devitalized arms and sinuous bodies that waved and writhed in love "with a fourteenth-century Florentine frenzy," was directed against Burne-Jones, the son of a small shopkeeper, who was dreamy and really feminine in his nature. The parody on Morris was the pale olive, peacock blue and pomegranate garb of the crushed Bunthorn and his admiring bevy. Rossetti was the target in the revival of obsolete meter forms where sound overpowers sense. The whole movement was made to appear as mere pre-Raphaelite mannerism and pettiness.

anything whatever that is new and tasteful, even though it be only an amateur's work. If we could only learn that "that is best which lieth nearest" and that genius consists often in simply finding the easiest and most natural way, so that the marvel is that it was not seen and realized before—this would teach us how, as Keats said, "Beauty is truth and truth beauty." Perhaps we ought also to understand the truth in Ruskin's statement that there is more genius in spending money discriminatingly than in acquiring it. The end is to utter one's self, objectify what is in one's mind. The true artist knows less about even his own method than anyone. If he tries to tell how, he makes sorry, clumsy work of explaining himself. Thus the canons and rules and all that the prowling pedants can do is simply to follow after the man dowered with a happy facility. Nothing is good and true not marked by the author's personal quality; and this cannot be analyzed or accounted for. Such an ideal should hover over all skilled labor and inspire with self-confidence, for that is the secret of all originality. No one can gauge his own capacities aright till after a long series of efforts to express his own ego; but the joyous, epochful moment comes when, starting with a meager idea, it unfolds into something of greater worth that fits and utters the inmost self.

The arts and crafts literature is voluminous and includes many Utopias in prose and poetry, all the way from Bellamy to Tolstoy and Kropotkin, and its attempted realizations range from Brook Farm and endless coöperative if not communistic organizations to Saint George's Gild and the Essex House and Gild of Mr. Ashbee. It proclaims not so much the Gospel as the Apocalypse of a new industrialism which is to be evolved on principles far higher than current economics. Cost is the quality and quantity of work that is put into a product. Price is what it commands in exchange with others. Wages are what will keep the artisans up to the top of their condition and most fecund in bringing new things into existence. The movement is socialistic and awaits a new order of things in which privilege and competition and great lords of industry who treat workmen as machines shall be done away with and artificial poverty shall cease. "Life without industry is guilt, and industry without art is brutality." It proclaims a true commonwealth which will one day control all means of production. Those who live in its cycle of thought want the book beautiful, the fabric, house, furniture, dress, etc., beautiful, and a new society composed of those who make their work art and love it rather than coerced toilers anxious only to do the least in the least time and get the most cash for it and hie to the saloon and brothel, since drudgery will inevitably seek recompense in pleasure and all who hate work are prone to dissipation. Every workman should express some trait of his or her individuality at least in minor arts, while use and beauty should at every point be united. The workshop is at once a school, a factory, and a state in which all are

citizens and colleagues. It illustrates the true comradeship of apprenticeship and master workman and arbiter or guide. The greater pleasure and enhancement of life is the end of art; to get a living is to gain more hope, love, and admiration, for these augment life. Each shop should be a studio. Every work should show the application of a personal touch, at least in the form of decoration, and all should strive to render social service by producing a perfect product. We must love our work as if it were play, be proud of what we make because our life has gone into it. Art and daily life must be united. Each in the industrial new republic, too, will own a house that he made and which fits and expresses himself, and some land about it that he may touch the soil and raise something. If the wages of all noble work are in heaven, as Carlyle said, we draw near to the celestial in so far as we make all laborers artists and all artists laborers. Triggs well says¹ that this idea will be realized about the time that Plato's ideal is, that philosophers shall be kings and kings philosophers. Work is a blessed privilege and its true and best product is a joy forever, for it brings the full fruition, than which nothing is greater, of original creation, of something which the world never saw before. This movement is a splendid iridescent solution of present troubles, but it is too ideal for the rank and file of men to-day. It may well attract the *élite* craftsmen who can inaugurate it here and there in a small way, but alas! the regeneration of society which it seeks is at least remote and few of us will live to see such an industrial millennium. So while we may bid it the heartiest of Godspeeds and pray for the coming of its kingdom, if we pray at all we must turn to nearer and more immediately practical, if less comprehensive, methods of industrial education.

The causes of the decline of this, in many respects, splendid system to the attenuated relic of the *apprentice system* is a very complex and much mooted question. The chief causes are probably the following:

(a) The specialization of many industries make it more immediately imperative for both employer and employee that the latter should focus on one process and become master in a small part of a trade, the rest being of no direct use. Where there are many processes it would require one expert to teach each most effectively, and this would be too expensive. Again, where piece work prevails, every moment a workman spends in teaching a novice is lost time so far as his own wages are concerned. One who wishes to change from one

¹O. L. Triggs. Chapters in The History of Arts and Crafts Movement. Chicago, 1902. 198 p.

machine to another that he has seen a little of, goes to a new shop, puts in practice what he has observed, until the foreman comes around, sees his lack of skill and discharges him. If he persists, he goes to the next shop and holds a similar job a little longer. Hanus knows one man who repeated this nineteen times. This, few will do—it is stealing a trade. In a large tailoring establishment, 39 men make a coat, and in a printing plant there are about a dozen trades. To make the 70th part of a shoe hardly takes the 70th part of a man, and nobody can perform all the processes. J. Skiffington stated that he left his employer nine times in seven years before he had learned his trade.

(b) Machinery in some industries requires only tending, and needs little intelligence or skill, so that there is not much to learn. Where a raw hand can learn to operate an automatic or slot machine in a few hours, weeks, or months, and attain his or her maximal efficiency, there is no need of apprenticeship and no individual training is of much service. I know a large concern employing many hundred girls, which practically takes all who come. They look on and imitate those next them, make the few simple manipulations easily, and are paid according to the number of articles they run through their gear; and at the end of a week a rapid girl often earns as much as slower ones who have been at it for years.

(c) Foreign skilled labor has been so available that it is cheaper to import it than to train it here. J. A. W. Logan, of Utah, estimates that 50 per cent of our skilled artisans are foreign-born and trained. The committee of the National Association of Manufacturers (1908, p. 17) estimates that 66 per cent, the New York Statistical Bureau that 60 per cent, Chicago that 70 per cent, Pittsburg that 75 per cent, the Bulletin of the National Education Association for Industrial Education (1908) that 50 per cent of the skilled mechanics, and 90 per cent of the foremen were trained in Europe. It is of no economic significance to employers that native-born Americans are more commonly found in only the half-skilled employments, or that, as H. Dooley estimates, 99 per cent of the overseers in the Lawrence, Mass., mills were trained abroad; or that, as the National Education Association Committee on Industrial Education says, "only about 2 per cent

can be provided with an opportunity to learn trades here, the other 98 per cent remaining unskilled." As long as Europe will train enough, and as long as they will then come over and bring their skill ready-made to us, why go to the trouble and expense to train them here?

(d) An apprentice system must involve some guarantee that boys who begin will stay long enough to become profitable, as at first they usually involve expense. This makes needful some system, if not of indenture or binding out, at least the surety of a pledge of honor on the part of the parents or of the boy, or both, that he will stay on for a term of years. This, some states now make illegal. Moreover, their parents are reluctant to give such a pledge and, owing to the early emancipation of our youth from home control, the parents would be unable to do it effectively if they desired. To the American boy it often seems somewhat like a modified contract system of servitude; he feels the time required to get his trade far too long—and naturally, when a man can be taken off the street and put in his place and in two months earn as much as it has taken him three or five years to learn to do. Moreover, learning a trade does not mean certainty of a job. Chiefly, however, he wants a wide-open world, and is sure that somewhere, sometime, a clean way to success will open up to him of itself. The very apprentice system idea is foreign to his nature. His chance is sure to come and Fate and Fortune may shake their choicest fruits into his lap in time, at least he wants to look about for himself and see if he cannot hit a good trail or strike a paying vein. He prefers to sample the world at several points, for never was the gambling spirit of trying for luck so strong. He prefers to find, rather than to make, his way, and feels it his ineluctable right to do so. What the boy wants, rather than what the father says, in this country too often goes. Often he will not learn a trade because he sees from a distance, and perhaps has felt from contact with it, the utterly deadening, stupid monotony of it all, and this repels him. Again, the big concern knows no personal relations; and this is just what the boy both needs and wants. Apprentices make but little, for it is said that in the last forty years, wages of first-year apprentices have not increased, while those of all kinds of

labor have done so. In some cases doubtless, too, the Trade Unions have too much restricted the number of apprentices, especially where trades readily take in those of foreign birth. So, too, apprentice boys are often under the rules of the Union and, if there is a strike, must join it; and this is one reason why not only employers but eligible candidates for apprenticeship are not very cordial to it. Moreover, employers too often refuse to take apprentices under 16; and this is unquestionably a little past the psychological age for apprenticeship.

(e) Where the apprenticeship system exists in this country, it is rather as a revival and under changed conditions, so that it is not what it was. Employers who use it, too, are prone to be shortsighted, narrow, and selfish, perhaps without meaning to be so, because they have not only not fully realized all the possibilities of the system for themselves, but still less risen to see all their duties in this regard; although some now state that so great is their need of skilled labor that with it their output might be doubled. The modern captain of industry has not been entirely successful in his efforts to stand *in loco parentis*.

The Pullman experiment is well known. Pelzer, N. C., which in 1881 consisted of a log cabin, now has 6,000 or 8,000 inhabitants, the lives and destinies of all being in the hands of an industrial corporation administered as a very enlightened industrial absolutism. There is no time nor money for municipal elections and everything is done for the welfare of the inhabitants that is consistent with profits. The school is built not by, but for, the children and keeps ten months. All sign an agreement that their children shall attend from five to twelve years of age. Ignorance does not make good producers, so schooling is profitable. There is a lyceum, library, occasional lectures, military organizations, baseball clubs, prizes for school attendance and for the most attractive yard and cottage. There is no home ownership as the company sells no property. This would prevent roving, but now, with 2 weeks' notice on either side, anyone can go. Not until 12 can children work. The paternalism here is less absolute than at Pullman. There is no proper apprenticeship here, but such instances impress the lesson that manufacturers should not as a class be alone intrusted with the industrial education of the boys and girls in their shops and mills, indispensable as they are as coadjutors. The state should rarely entirely relinquish its right at least to have a hand in the education of all its future citizens, because men and women are

more than producers. In fact, the same causes that led employers to neglect the apprentice system decades ago and allow it to decay until lately, still operate even if happily with growing amelioration. Producers must think of profits and so incline to too short courses.

(f) The Labor Unions have sometimes enforced restrictions upon the apprentice system that make it onerous for corporations. The census of 1900 gives a total of 18,482 apprentices and helpers in 16 trades, constituting 2.45 per cent of the total number of employees. The highest proportion was 5.8 per cent among machinists, 5.7 per cent among plumbers, gas and steam fitters, and 6.7 in other miscellaneous industries. In the building trades in Massachusetts, 1.3 per cent are apprentices. A study by the American Social Science Association shows that of 48 Trade Unions with a membership of 500,000, 28 (membership 220,000) place no restriction upon apprenticeship; while 10 Unions (membership 107,000) place the limits variously ranging from 1 to 15 per cent; the remaining 10 leaving the question of apprenticeship with the locality. A delegate lately interviewed 600 master-painters and found that 1 in 15 had an apprentice. The larger the shop, the greater the dislike to teaching boys. The Massachusetts Commissioner of Labor reports (1906) that in that state the percentage of apprentices in closed, was no less than in open shops. Adams and Sumner¹ point out that only 1 strike in 300 has grown out of the apprentice system. Benson reported as a result of the St. Louis experiment that Labor Union apprenticeship rules in 19 trades allowed 1 apprentice to 8 journeymen, the largest number being among electric workers, 1 to 3, the smallest in glass blowing, 1 to 15. Of course, journeymen do not like to train apprentices who are liable to take their place. In general it would seem that the ratio of 1 apprentice to 4 journeymen in most trades would not be excessive.

The attempts to revive the apprentice system are of great interest, but this will probably always be limited to a few lines of business. C. A. Howe found that of 400 Ohio manufacturers, less than 65 had any kind of apprentice system,

¹ Thomas S. Adams and Helen L. Sumner. *Labor Problems*. New York, Macmillan Co., 1905. 579 p. See p. 439.

and only 3 turned out finished workmen. The Massachusetts Bureau of Labor circulated the question, "Is there an apprentice system in your trade?" Thirty-one employers and 55 Labor Unions said yes and 44 no. Many firms require a common school education. Apprentices are often put in charge of the foreman, who may be a foreigner. E. A. Stevens found a New York town of 6,000 where only 1 boy was learning a trade and 2 helping their fathers. In another city a sign factory with 200 men had 14 apprentices, a pulley factory, and a clock factory with a large number of employees had none. As to the comparative value of daily training in tool work in the later grammar grades with apprenticeship in the shop, many opinions are quoted both ways. Surely a vigorous boy of 14 should not be prevented from entering a trade. The committee on industrial education in the National Association of Manufacturers recommends a high grade trade school in cities of 30,000, that all these should turn out full-fledged journeymen, and that the apprentice system should not be allowed.

As a basis for discussion and with the help, for this country, of Mr. George H. Steves, I have gathered from many sources and from personal correspondence with nearly 200 people, representing various aspects of the subject, data concerning the following *typical recent departures*, revised where possible to date (Summer of 1910).

Professor Schneider, of the *University of Cincinnati*, was the pioneer of a new movement when he established the plan of the engineering school of that institution where the classes are divided into two sections that alternate so that one is in the university and the other is in one of the electrical shops in the city. They begin with the foundry, pass to the machine shop, then are in the commutator and comptroller's office, the winding, testing, and erecting departments, then in the drafting room and the office—thus following the raw material until the product is sold. A legal contract is made and signed by shop, student, and university. In the shop the pay is 10 cents an hour and increases at the rate of a cent an hour each 6 months, so that they earn about \$1,800 during the course. All must enter the shop during the summer preceding their entrance to college. The first year, 1906, 60 inquired, 40 went to the shops, 20 remained and entered the university in the fall. The second year 800 inquired or applied, 60 were selected for the shops in July, 44 remained. The third year the applications were about 2,000. This

is returning to the old apprentice system with definite instruction attached. It adds little to the cost. This movement, of course, assumes that the very first duty in training for citizenship is to make young people self-supporting. The logic of the situation points to a broad, new plan of coöperation between the schools and industries.¹

The Milwaukee School of Trades. In February, 1904, a business man, F. W. Syvier, urged before the Merchants and Mechanics Association the need of industrial education, and asked public support. In January, 1906, a school was opened. It soon grew beyond the power of this association to support it, and so a special legislature passed a remarkable bill widely read and copied, under which an added school tax was levied to support the school; and in July, 1907, the entire equipment was deeded to the city. Students admitted must be 16, able to read, write, and cipher. Eighth-grade graduates enter without examination. A preparatory course is contemplated. There is a large three-story building 144 × 50 feet. The school is free to residents, but costs the city \$225 a year per pupil. There are 4 trades: pattern making, machinist and tool making, carpentry and woodworking, plumbing and gas fitting. Plumbing requires 1, but the other courses 2 years of 52 weeks per year and 44 hours a week, closing only for legal holidays. The conditions of the special trades are reproduced as exactly as possible so that the boys work under shop conditions. Each is advanced on his merits and not held back by the slower boys. Material is charged for: about \$4 or \$5 a month, payable monthly. There is a month's probation on entering; good physical condition is required; and sickness is the only excuse for absence. The school does not turn out journeymen, but claims to be equivalent to a 4-years' apprenticeship. All work is done from drawings. Tobacco is tabooed. Working hours are from 8 to 12 and 1 to 5—14,464 hours in all. Each trade is equipped for 25 students, except the machine shop, which can take 40. The equipment is of the highest possible grade with a long list of machinery. The diploma is given whenever the course is complete, and time may be saved by ability and diligence. The grade corresponds with the pay the graduate will receive when he becomes a journeyman. The school is under an advisory committee of 5 citizens, not members of the school board, who are experienced in one or more of the trades, but appointed by the president of the school board. They prepare courses and purchase supplies. A special tax not exceeding half a mill on the total assessment of the city may be levied. Non-residents and those over 20 pay \$15 a month for the day, and \$4 a month for the night classes, which is slightly under cost. One quarter of the time is given to academic work.

The Baron de Hirsch School is a short-course trade school. Instructors are largely foremen. There are 2 classes per year of 5

¹H. Schneider. Partial Time Trade Schools. *Annals of Amer. Acad. of Pol. and Soc. Sci.*, 1909, vol. 33, pp. 50-55.

months each. Day classes are 8 hours each, or 800 working hours to the course. The academic side of instruction is mechanical and free-hand drawing, shop arithmetic, illustrated lectures on the theories and principles of the trade, and shop instruction in actual performance with stress on speed. Each pupil is a probationer for 2 weeks to show whether he has sufficient maturity and physical ability. The minimum age is 16. There are frequent tests and examinations. Classes are admitted in February and August. Applicants must be Jews who can speak and write English. Some 60 per cent are, in fact, immigrants. There are no fees, but applicants must show that they have means of self-support. About 90 per cent of all are wage earners before entrance, so that the sacrifice of wage is the test of earnestness. The trades are: machinist, carpentry, electrical work, plumbing, sign painting; and the academic instruction is designed to help the practical occupations. Stress is laid on teaching pupils to read drawings rather than to make them. About 84 per cent remain through the course and about 80 per cent have found employment in the trades here learned. The average wage of 200 before their entrance was \$5.39 per week; their average immediately after graduation was \$7.54 per week; while some started in at \$15 per week. Mr. Yaldan, the superintendent, found by circular inquiry that the quality of the recruits of the industrial army was deteriorating and that manual training was a failure. The census showed that 60 per cent of the employees in manufacturing and mechanical pursuits were foreigners or of foreign parentage, and the children of natives mostly left school before the completion of the grades. From this school, hundreds are turned away each year for lack of accommodations, and those who go make sacrifice in the hope of future gain and are carefully selected. Evening classes are objected to here because with a course of some 22 weeks a 3-years' course is necessary to give the equivalent of a 5-months' course. Moreover, no sacrifice is required, and those who have worked during the day are not in the best condition.

The *Vocational School at Springfield, Mass.*, was opened in September, 1909, for boys of 14 and over who had finished the seventh grade of the 9-year system and who wished to learn a mechanical trade. The school aims to prepare boys to become journeymen after serving an apprenticeship when necessary. The school is in session 6 hours a day for 5 days in the week, closing Saturday noon. During the first year the academic work is in the morning, shop work in the afternoon. Two teachers, one skilled in wood and the other in iron, are employed to teach a group of 25 boys each. Academic work is affiliated with that of the shop.

The *New Bedford Industrial School* is of high school grade and free. In order to enter, a boy must be 14 and have a grammar school education or its equivalent. All are strongly urged, but not required, to finish the grammar course. This school fits not for college nor for scientific schools. The first 2 years are the same.

The last 2 years are devoted to applied science, drafting, shop work, wood and other matters and the course in operating automobiles. It will keep closely in touch with employers so that openings may be made known to graduates.

The *Hebrew Technical Institute of New York* (1884) fits for mechanical trades, but primarily for higher technical institutions. The minimum age of admission is 12½. The average age of applicants is nearly 14. They must be residents of New York and take examinations to the seventh B grade of the public school. It is preferred to have applicants who have completed the grammar school. All must submit to a physical examination and furnish testimonials both of ability and character. Tools, books, tuition, are free. Lunches are 2 cents a day or 10 cents per week. Shower baths are free, and swimming is required. School is in session 5 days a week, vacation the first 2 weeks of July and the first 3 of August, with half-day sessions during the summer. There are evening schools for men, who must be 19, and pay \$1 a month for apparatus. All must intend to complete the course and bring excuses for absence or tardiness; and there are monthly reports of attendance, progress, and character sent to the parents. There is a reference and circulating library. The Hebrew Sheltering Guardian Society and Orphan Asylum and Educational Alliance maintain preparatory classes which fit for the second year. All take the same course, which is more general, the first year, and those without mechanical aptitudes or physically unfit withdraw. At the beginning of the third year, students are advised to choose some trade and specialize. Useful articles are made and conditions are as near as possible those of a shop. Much is done from blue prints. Some mathematics, physics, mechanics, electricity, are taught, and shop work, including drawing, occupies in the first year 16, and in the second 18, hours a week. In 1907-8 there were 288 day students, and 84 graduated from the 3-year course. The cost per pupil is a little over \$100 a year. Seventy-five per cent of the graduates follow the trades learned here.

The *Fitchburg plan* was suggested by the metal trades which found it hard to obtain recruits. They studied the Schneider method of Cincinnati for university students and adapted it to those of high school grade with a 4-year course. There is a 2-months' probation in the summer before the school opens to weed out those unfit. The first year is given wholly to school, but the studies are given a practical, preparatory character. During the next 3 years, the boys who elect this course alternate weekly, those who have been in school going to the shops Saturday at 11 o'clock to find how to carry on for the next week the work of their alternates. The shop work is divided into 3 periods of 1,650 hours each, for which the boys receive 10, 11, and 12½ cents respectively for their work. They have practice under direction in the operation of lathes, planers, drilling, and other machines, bench and floor work, according to their ability, the

wage scale beginning the first day of July. The director, Mr. Hunter, voices the manufacturers in stating that manual training as fitting for a trade is a failure. It turns out putterers who must unlearn much and learn other things before they become effective for business. The trade schools now found throughout the country, with a few notable exceptions, also fall far short of fitting into our industrial system. Their equipment is usually inadequate or antiquated and their courses too cut and dried to make them effective in preparing young people for industries. But this method of utilizing the actual workshops as an annex to the school system, which began in the fall of 1908, so far gives the highest satisfaction to business men, parents, and the school authorities. It involves little or no expense to the city. The boys make supervised visits to other plants, and it is proposed to add paper making, woolen and cotton manufacture and any trade where there seems to be a demand. The school work of these boys is as far as practicable either based upon actual exigencies of the shop or is directed toward those aspects of mechanics, physics, chemistry, etc., which are likely to be of service. An industrial society conducted by the boys for mental and social improvement has been organized, at which manufacturers give talks. The superintendent of schools thinks the time is at hand when practical courses, instead of being regarded as inferior to the classical, will be thought superior. He says that the demand for industrial training is so great that "We need not be surprised to hear in the near future the criticism that our high schools are mere machine shops, instead of the criticism hitherto so prevalent that they were maintained merely as feeders to the college." He deplores the fact that the splendid high school buildings are in use so little of the time and thinks such an expensive plant should be put to use afternoons if not evenings. The boys graduate as journeymen and always find jobs. The shop work is under a foreman. Boys who prove unfit can take the usual high school course. Shop work is given for both alternating classes during the summer.

Chicopee, Mass., has a high school shop 40 × 80 feet. The first floor is devoted to the shops and the motor woodworking benches, lathes, milling machines, drill press, grinders, gas furnace, hand-saw, etc. The second story is for a drafting room. Every form of productive work has some educational value and is as much worth knowing as Greek and Latin. The Evening School, while under the School Committee, is separate and independent under a board of trustees.

W. C. Ashe, principal of the *Philadelphia Trade School* for bricklaying, carpentry, plastering, plumbing, printing, blacksmithing, sign painting, pipe fitting, etc., opened in September, 1906, tells us that the school began with too many trades, some of which were discontinued for a season. The school is open every school day. It does not fit for any higher institution. In the 3 years all must spend 4 to 6 weeks in actual work in the trades in the city. The

average age of enrollment is 16½. There is an evening and an annex school and a long waiting list. The Board is considering opening evening schools of a practical nature in the basement of all school buildings.

The *Stout Institute, Menomonie, Wis.*, is to train eye and hand and to give some direct fitting for skill. Certain prescribed work involving fundamental and related occupations is given for each grade from kindergarten up. Courses for boys and girls are largely separate from the fifth grade on.

The *State of Connecticut* has established 2 industrial schools, at New Britain and at Bridgeport; the latter will take boys 14 years of age. The plan is not yet complete. If the local shops take the products of the school shops, the expense will be diminished.

C. B. Gibson, superintendent of schools, *Columbus, Ga.*, has done a unique work to meet the demands of the citizens for more practical education. This city of 25,000 has 12 cotton mills, iron and woodworking industries. The elementary school had for a decade taught manual training and every negro girl (the blacks are ¼ of the population) was given a course of 5 years in home economics and domestic industries. Poultry, milk, floriculture, vegetable gardening, with home life central, are taught for the girls; and the boys are taught blacksmithing, carpentry, etc. The industrial trade high school, the first of its kind in the country connected with the public school system, is open 11 months in the year from 8 to 4, with a 3-year course. Pupils must be 14 and have finished the fifth grade. Tuition is free, but each pays \$5 for books and material. No foreign languages are taught. The essentials of academic study are combined with some trade. There are 30 hours of industrial work and 22 of academic throughout. Seniors spend the last 2 months in active trades, guided by the school authorities. At the graduation exercises each shows what he or she can do. Cloth is woven on the stage, for instance, a dress cut, fitted and made, and a member of the class returns to the platform wearing it and receives her certificate. Five experts in the leading industries supervise the school. Incidentally only are graduates prepared for technical schools. The school lunch is prepared in the domestic department. "Every product has an economic value which cannot be divorced from the educational value of the process. The products are the property of the school and, if sold, the price is converted into raw material to be used by the boys in producing other products of economic value." Excursions to establishments are made and discussed. Graduates are placed by the advisory board according to their fitness. Perhaps one comes from overalls to evening dress for his diploma, feeling that the true American can wear either with equal grace. At the commencement anyone in the audience can propose a problem or dictate a letter. The cost of the school was \$100,000. Rich and poor work side by side. The test

is the 2 months without pay in the factories where their capacities are gauged. The cost is less than the average American school, viz: \$18.40 per capita per annum, the average in the United States being \$46.40.

Public School No. 100, New York City, under C. J. Pickett, was opened in September, 1909. It admits boys under 14 with a grammar school diploma, or its equivalent if they have mechanical tendencies. The mechanics' trades are taught by 25 carefully chosen skilled mechanics. School hours are from 9 to 5. Various wood industries, as well as machinery, forge work, sheet iron, plumbing, printing, draughting, architecture, etc., are taught. Shop instruction is individual and the atmosphere is like that of the commercial shop. The aim is not so much to turn out journeymen as to give boys a chance to enter skilled industries in a way to shorten apprenticeship. The academic course requires less than $\frac{1}{4}$ of the pupil's time and the mathematics, history, civics, geography, and English are closely connected with industry. All is in terms of efficiency.

The *David Rankin Junior School of Mechanics Trades* of St. Louis opened September 1, 1909, in a brick, 3-story building with 5 shops, draughting room, assembly hall, science room, library, class room, offices, tool equipment, etc. The regular courses are open to men and boys of 16 and over who have completed the seventh grammar grade. Of those experienced in a trade less schooling is exacted. In exceptional cases boys of 14, if they have completed the seventh grade, are admitted. They must be in good physical condition. There is no set time for the length of the course. The school runs from September to August from 8 in the morning to 5 in the afternoon with Saturday afternoons free. The first year there is only carpentry, bricklaying, plumbing, and painting. Day school pupils pay \$30 a year and a few work it out, though this is far from defraying the expenses of the school, which is in a city block. The founder insisted that all instruction must be practical. There are certificates of graduation.

The *Williamson Free School of Mechanics Trades*, Pennsylvania, 16 miles from Philadelphia, has 24 buildings and 230 acres. It was founded in 1888 for bricklayers, carpenters, machinists, pattern makers, and stationary engineers. It has its own light, water, and sewage plants as well as post office. All who enter must be between 16 and 18 and must pass a scholastic, moral, and physical examination. After probation, pupils are indentured for 3 years for one of the above trades. Board, instruction, clothing are free. The school is open through the year, but exercises are suspended in August. Pupils are divided into 24 families each with its matron and cottage. School keeps 8 hours a day, save Saturdays, when it keeps for $3\frac{1}{2}$ hours. During the first year half the time is spent in the shop and this increases until during the last senior months all is shop work, with instruction 3 evenings a week. Work must be rapid and accurate and time cards aid proficiency. Ninety-five per cent of the

graduates enter a trade at once, and probably 80 per cent with full journeymen's wages.

Trade teaching in so highly specialized an industry as that of *boots, shoes, and leather* which in this country employs 150,000 workers with a capital of \$25,000,000 and a product of \$250,000,000, with its many automatic machines and stages, some of which can be learned in a day or a week, is unique and difficult. The Lynn High School has samples of shoes worth \$250 as the nucleus of a commercial museum; trade sheets are used in bookkeeping; business transactions are precisely those of the factory; pupils work out pay rolls and cost of production. The high school of another Massachusetts shoe town, Brockton, has a \$400 line of shoes to show processes and an elective course involving the history of the industry, tanning, transporting, chemistry, bleaches, patenting, blacking, together with lasting, etc., with most of the training given in the factories themselves, each of which has a trade school for a number limited by the interests of the concern. The country factory is nearer the school than the large city plant and gets winter work from the farms; and then, after acquiring a little skill and beginning to steal the trade, the workman goes to the large factory posing as skilled; or the factory sends an agent to gather in workers, men and women, from the small towns. While an able boy can work his way from the bottom to the top, the tendency is to stick to one line of piece work. In a single room of the Bedford Street School, Boston, continuation classes in shoe and leather work for 40 boys, 2 hours a day and 2 days a week, were opened April 11, 1910. This was done by and under the school board, but upon request of the leather men. The course will stress merchandising rather than the manufacturing side of the business. The Beverly idea, on the other hand, is shoemaking, with 2 squads of boys of 25 each, one in school and one at work, alternating weekly and receiving half the piece price of what they do. Thus here, as with other industries in Rochester, New York, where 20 concerns, and in the Lewis Institute, Chicago, where various firms come in, manufacturers coöperate. In Europe there are several schools: e. g., Bethnel Green under the gild of the London Institute and the liveried companies which contribute money and advice. Machinery is loaned, material given, and practical men teach. There is a general outline of the whole industry. At Leicester, England, a good course is given in a technical school along with hosiery and plumbing, with weekly lectures on the bones and muscles of the foot, designs, estimates of stock machinery given by the companies; while Northamptonshire has the evening type in 8 shoe centers near by, with full time paid instructors, trifling fees, etc. The operative need not know the whole trade, but can select his subdivision after some experience. The royal Prussian shoe technical school near Düsseldorf is under the government and runs 8 hours a day for 46 weeks. Foremen are turned out in 6 months, superintendents in 2 years.

The Master Printers of Boston established an evening school in January, 1900, which in 1904 was changed to a day school with shop hours. Applicants must be 16 and well recommended; and the school hours are like those of the shop, 48 per week. The first year each boy pays \$100 in quarterly installments in advance. This guarantees earnestness. The course embraces book work, jobbing, advertising, composition, platinum press work, etc. The school takes no orders, but is run purely in the interests of the apprentices. Its expenses are partly met by the tuition and partly by contributions of employing printers, who constitute a board of supervisors. It is well provided with apparatus. There is an apprentice festival yearly with addresses and a collation, where the indentures are signed which contract for a 4-year course, the first year in the school, the remainder in the shop, where the apprentice earns \$9 at first; at the end of the third year, \$12; at the end of the fourth, \$16 a week. Thus he is assured of an opportunity to learn his trade well and can see his way 4 years in advance and is practically certain of finding a good place. It is believed these graduates furnish a high grade of skill and faithful service. It is thought a far better place to learn than a trade school or a printing office.

The *Typographical Union* finding that high specialization did not render printers able to teach a trade well, because every moment spent in teaching lowered the foreman's efficiency, so that if he were warm-hearted he was liable to be discharged, established a system known as the International Typographical Union Course in Printing, which is devoted to the principles underlying good typography. There was great diversity of standards and many disputes about taste; and this often prevented capable compositors from exercising originality or ingenuity. The course of 30 lessons had usually cost from \$50 to \$60; but the Inland Printer's School sought instruction at cost price, the Union doing the advertising and giving a rebate at cost price, or \$20 with \$5 for an outfit. Each student has a right to seek advice from expert local printers who have always a wealth of subconscious knowledge that comes out on occasion. Students jot down on strips what they want to know, and all, even the backward students, are helped. The Union does not believe in schools that turn out inferior workmen or those that become "scab hatcheries" and swell the hosts of the unemployed, which employers would like to see. Schools must not be run for profit only or turn out half-baked workmen in short courses. This seems to be the sentiment of the 50,000 members of this Union with the 700 local divisions, of which *The Inland Printer* is the craft's leading journal. Correspondence courses are not approved.

Donnelley and Sons Company of Chicago (Lakeside Press) opened an apprentice school in July, 1908, to teach boys printing. They must be grammar school graduates between 14 and 16 and are apprenticed for 7 years. A hundred boys carefully chosen from 30 grammar schools are enrolled. They work in classes 8 hours a day.

For the first 2 years they attend school daily $3\frac{1}{2}$ hours and work $4\frac{1}{2}$ hours in the various departments. Divisions alternate weekly between the school and shop. The work is curriculized and begins with the simplest form of typesetting. If a boy keeps a monthly standing of 75 per cent for 6 months, he receives a bonus of \$25 payable semiannually. Those who maintain this standing for a year receive 2 weeks' vacation on pay. At the end of 2 years the boy selects his trade department and works regularly in the shop, attending school 2 or 3 hours a week. The school has a library in English literature, trade journals, etc. The first year boys are paid \$2.40 per week or 10 cents an hour for shop time; the second year \$3 and the third year \$5. Wages increase every 6 months until at the close of his time the apprentice receives \$20 a week. If the work is satisfactory they then receive a diploma and are considered first-class compositors.

The *Albany Vocational School* opened April, 1909, with 50 boys and 50 girls and 146 on the waiting list. Most pupils were of the seventh grade and about 14. A letter had been sent to their parents, who generally desired such a school. The minimum age of admission is 12. The course is 4 years with a 6-hour day. The first 2 years are preparatory and then the pupils decide whether they will continue industrial training or enter the high school. If the former, they specialize in one of the industries of the city which requires preparation. Of the 1,800 minutes per week, 600 are given to shop and hand work, 300 to drawing, 255 each to English, geography, and arithmetic. In the third and fourth year, 900 minutes are given to drawing and shop, 225 each to algebra and geometry, physics, chemistry, and mechanics, with 100 minutes to industrial history and economics. The 30 hours a week are equally divided between academic and technical instruction. Hand work for the first 2 years is like that of the local high school, but 15 hours a week instead of 2. During the last 2 years, work is shaped toward local industries. Girls keep house in the kitchen and dining room, furnished in simple style, and are taught laundering, cooking, and bookkeeping. There is a well-equipped sewing room. History and civics are taught to make citizens; mathematics and the sciences are applied. The school is in an 8-room building that does not permit machinery, foundry, or forge. The original equipment cost about \$2,805, maintenance about \$3,400, exclusive of janitor.

The *Agassiz School, Boston*, originated in letters sent out in June, 1909, stating that 50 sixth-grade boys who liked to work would be selected. Those chosen were divided into 2 equal sections with an hour of industrial practice a day. The product must be wanted. First boxes used by the school were made. Each boy made a whole box and then the work was specialized in from 2 to 6 parts. The efficiency of the boys measured by the output of boxes is said to have increased about 400 per cent. They were first grouped by ability and then a check system traced each piece of work to its

source. Groups were frequently changed. Hundreds of pencil boxes were made for high school pupils, and Harvard covers with leather backs and corners. The time given to this was deducted from manual training, drawing, and arithmetic. Each keeps a record of time, material, and output—and this is the basis of arithmetical exercises. Industrial words: tools, processes, etc., form the basis of spelling.

At *Beverly, Mass.*, a vocational school was opened in August, 1909, with 42 boys from 14 to 17, under 2 skilled machinists. The United Shoe Machinery Company furnished the shop with an excellent equipment, in one of its buildings, at a cost of \$35,000. Material is supplied at cost and the boys receive a stated price for products. The city appropriates \$1,800 for expenses and it is expected the state will double this sum. Boys are in 2 classes, working and attending school alternately through the year. The vocational school is in the hands of a board of trustees.

The *Portland, Ore., School of Trades*, part of the public school system of Portland, was established in September, 1908, in a 22-room building. The school opens at 9 A.M., closes at 1 P.M., 5 days a week; there are 25 minutes for lunch, and the course is 3 years; tuition free; books must be purchased, also overalls and drawing instruments; breakage of tools and undue waste of material must be made good; 15 hours a week are academic for 2 years, and 13 for the third year. A boy must be 14 and is supposed to be a graduate of the grammar school. All must take academic work unless they have had it elsewhere. Then they can spend their extra time in the trade work, viz., machinery, trades, pattern making, molding, foundry, electrical instruction, mechanical drawing, plumbing, gas-fitting, bricklaying, plastering, wiring, cabinet making, architecture, etc. When a boy enters, he chooses his trade, and it requires 12½ hours a week for the first 2 years and 14½ for the third year. In the second year girls are admitted and offered courses in dressmaking, millinery, domestic science; other courses are to be added.

Newton, Mass., in 1909, opened a school for boys of the seventh and eighth grades who were not going to high school. Provision was made for only 18 at first; but probably 50 must be provided for. The course is 3 years. Those who enter must practically promise to remain until the end. The pupils are from 14 to 17. They work 30 hours a week, 16 of which are devoted to shop work, which at present is only in wood, 4 hours to mechanical and free-hand drawing, and 10 hours to academic subjects which are related. This means 5½ more hours of work than in public school, and it may remain in session till August 1st. The boys evidently feel the need of this work or the older ones would not seek it.

The *Columbus, Ohio, Training School* is part of the public school system and was opened in November, 1909, in an 18-room building. Boys must be 14 and have finished the sixth grade, but under certain conditions this requirement may be waived upon recommenda-

tions of teacher, principal, or superintendent. Older boys may be admitted if there is room, but preference is given to those who want to learn a trade because of poverty, death, or inability of the parents to keep them in school or who do not like culture studies. The equipment cost \$30,000; capacity, 350 pupils; 205 are enrolled. Classes are limited to 16. Printing, woodworking, mechanical drawing, etc., are taught. The products of the shop are used by the school. An electrical and machine shop department is to be added, a kiln, dry room, storage, etc. Each selects a trade and the drawing has a direct relation. If a boy proves not adapted to a certain trade, another may be chosen.

The *North Bennett Street Industrial School, Boston*, was founded in 1880 to train the unskilled masses. Up to 1909 it had registered a total of 38,000 persons. The house was first leased, then purchased. In 1905 a social service house was added near by, and in 1908 a third. This was a private beneficence of Mrs. Quincy Shaw, although the city now contributes yearly \$1,300 to the library. For years pupils have been received from 2 public schools near by for old-fashioned manual training. A 4-page paper is printed monthly. The girls' house has a dining room, kitchen, and bedroom, and here 50 girls not younger than 13 receive 10 hours a week of industrial training. Two points of view—self-support and the home—are distinguished throughout. The work here has been lately greatly developed and was reorganized on a larger scale in 1907-8. Sixth- and seventh-grade pupils chosen from the neighboring schools come here in divisions and give 35 per cent of their time to work. Some fit for the Boston Trade School. The gain in character, personal appearance, interest, and desire to work after school has steadily increased. In 1909 some kind of industrial training was given to over 600 pupils. Under the direction of A. E. Dodd (1909) the membership grew to 1,700. There is a fee of 25 cents for those 14 and under, 50 cents for those up to 19, and \$1 for those older. The variety of work here is very great, including toy making, casting, stone carving, pottery, etc., and nonindustrial work includes folk and round dances, singing, etc., with evening classes for those older and from a distance. There are no less than 25 clubs connected with the institution, which hold meetings periodically where different nationalities, various lines of reading, study, debates, dramatics, drill, miniature cities and states, games, stories, history, politics, etc., are represented. There is a stamp saving system, also gardening. This is station W of the Boston Public Library with a circulation of 73,000 books in 1909. There is also a Research Department for the study of the social conditions of the North End. One of these investigations was of a grammar school, which showed that out of 3,224 girls who entered, only 261 graduated, of whom less than 100 entered the high school, from which 20 graduated. Another study showed that 29 per cent of the girls during 7 years had moved. Another showed that of 135 families, nearly half were more or less

dependent upon the work of mother and children; and yet another that out of 1,317 owners of property near by, only 553 were residents, and of these 32 per cent were Italians and 22 per cent Jews. There were 189 chattel mortgages, and 296 tenements in the district.

The *Hampton Institute* of Armstrong and Booker T. Washington seems destined to become almost classic ground for those interested in industrial education. It is teaching the most practical occupations: carpentry, blacksmithing, tailoring, wheelwrighting, machinist's trade, upholstering, painting, shoemaking, bricklaying, steam fitting, harness making, printing, and tinsmithing. There is a clinic or repair shop which operates on broken furniture and carriages, and small houses are designed and the cost figured out. There are 3 cooking classes: one very elementary for girls not likely to be there long; one more advanced for middlers; and still another, with a touch of chemistry in it, for those intending to teach cooking. The most popular is the sewing department with basketry and lace making added, because slovenly work can best be detected in the former and the latter best teaches accuracy and care. The academic is based upon the practical at every point. Language is first taught by doing something to talk and write about, and there are no books for 3 months. Mathematics is based on the cashbook, which each must keep, showing what the school owes him for work and what he owes the school for board. At the end of 3 months his account must square with that of the office. Also cost of material, time, bills, memoranda for the shop and kitchen are made class work. Geography is based partly on industry, partly on current events. Drawing is of houses, window boxes, frames, book covers, cards, designs made in the school. In the school of gymnastics, measurements and records of family and home life are kept, with moral improvements. In music, folk songs are cherished along with good composers. The Bible is of immense influence because the story of the children of Israel is so like that of the pupils here. Many other schools have sprung up more or less on this pattern—e. g., the St. Paul School at Lawrenceville, Va., with between 20 and 30 departments of industry, with stress on lumber manufactures and building. They also make brick, have a granite quarry, and erect their own buildings. Milk, pig raising, and dunging are made academic subjects.

The *Berea Evening School* is fed by the 80,000 to 100,000 negroes in greater Philadelphia and, to some extent, by the 12,000,000 colored people in the country generally. Twenty-five years ago lots were bought, and then a building and loan association established, so that this school is a business concern with 2,700 shares of stock and \$150,000 assets; 200 members own their homes at an average valuation of \$2,000. The school is open from 7.45 to 10 P.M., students coming sometimes from such great distances that they do not reach home before midnight. If there were room, the principal, Mr. Anderson, thinks there would be 500 or 600 pupils. It has no endow-

ment but is supported by subscription. The colored people are now realizing that they must learn to work.

L. W. Miller describes the *Institution of Industrial Art, Philadelphia*, established as a result of the Exposition, 1876, and designed to illustrate industrial history and serve industrial needs. This museum is richest in textiles. The first year is devoted to plastic training and the actual handicraft comes later. Its school of textile designs, 1884, was the first here, and was due to manufacturers who felt they were being beaten in the home markets, despite the tariff, and so Mr. T. Search established his courses. The distinction between technical and trade instruction is ignored here, and intelligence even more than manual skill is needed. Pottery, stained glass, iron ornament, bookbinding, work in leather, etc., are so taught that industrial education shall not become "a tail to the high school kite and nothing else, for this kite is already out of sight in the clouds of the impractical and the demand for something better is insistent." English, the classics, and science are taught only as applicable. Pupils must be at least 16, must pass an examination and show aptitude. The demand for profitable employment is greater here than that for a diploma, which comes at the end of 3 years. At first the school was supported by gifts; but the legislature now gives \$50,000 and the city \$25,000 a year. There are free fellowships from the public schools. The enrollment is about 1,000 with 40 instructors.

The *Polytechnic Institute of Brooklyn* is unique among the 135 departments and schools of technology of the country. When it began half a century ago there were but 6 like courses, and its work has been revised to date. Half these students come from the high schools of greater New York, entering at the average age of 20. The course is 4 years, is adapted to industries, and social and other qualities necessary for leadership are developed. Half the studies are purely technical and some purely cultural. Engineering is a profession, so logic, philosophy, and psychology are included with English, history, economics, and modern languages. Lectures are given by experts of the Bureau of Municipal Research on the working of the government departments. There are evening classes and a variety of practical work.

Principal C. F. Warner describes the *Mechanics Arts High School of Springfield, Mass.*, which opened in 1899 on the basis of a languishing private plumbers' trade school. In 1907-8 the enrollment was 396. This was one of the first of its kind, and Cambridge, Hartford, Cleveland, and other cities followed. Major emphasis was on the shop, but the design was to supplement its imperfect and highly specialized training by giving greater variety and ultimately to improve the quality of work and increase wages. The law of 1870 required all towns of 10,000 or more in the state to maintain evening draughting schools. Two thirds of the enrollment has been in the mechanics trades. Tuition is free to residents. Few had not

some experience in their chosen line, showing the tendency to drift. Evening classes are felt to have great limitations.

In *Leominster, Mass.*, in August, 1908, the parents were asked by postal card whether they would like their eighth- and ninth-grade children to take a more practical course. As the answers were favorable, in September such a course was opened to 65 pupils. Academic work was given half a day and industrial training the other half, alternating each half day. One school building is devoted to it. In addition to the grammar subjects the pupils must take bookkeeping, elementary science, and the girls must take sewing, dressmaking, cooking, etc. Twenty per cent of the boys chose to work either in the shop or at some trade half a day; and they are paid. Articles made at the school are sold; but pupils are not kept on the same work until its educational value is lost. There is a need of industrial text-books.

The *Rochester Factory School* is unique. In the summer of 1908 superintendents in factories were asked what preparation they thought most fit for those entering their industries. The demand was for boys who could apply mathematics to shop problems, state what they wanted, had some general intelligence as to sources of material, who were able to meet emergencies, not afraid to soil their clothes, and could work if alone, and would not abandon their job for 50 cents a week more in driving a delivery wagon. Thus adaptability and industrial intelligence were the chief requisites. Now a boy must pick up his information or owe it to the friendship of a workman. He should know something of the theory of his trade, the names of tools, materials, etc., be able to read blue prints; in plumbing should know the names of the fittings, how to make out bills, and something of lubricants, hydraulics, and metallurgy, and something of established cost. Then they studied the boy problem. There were 824 boys of 14 of whom 542 would not enter the high school. The parents of 233 of these desired them industrially trained. The course was submitted to the trades and labor council and $\frac{2}{3}$ of the Trade Unions favored it. So a building was provided: the lower floor a workshop; the upper floor for study and drawing; below 25 six-foot benches were equipped and there was a supply of lumber, glue, etc., with circular and barrel saws, joiners, planers, borers, etc. School opened December, 1908, with 49 eighth-grade pupils and 2 teachers of wood only. In February, 60 eighth-grade boys were admitted and 2 more teachers and machinery were added. These hundred boys were divided into 4 classes: 15 hours a week in the shop, 5 in drawing, 5 in mathematics, $3\frac{1}{4}$ in English, $1\frac{1}{4}$ in spelling, $1\frac{1}{4}$ in industrial history. At the end of the first year 85 boys were enrolled and carpentry, cabinetmaking, and electrical trades were added. Mathematics was industrial; English was business English; 25 words from industrial reports were spelled daily; they studied economic conditions in different lands, wage scales, laws, organizations of industry. The boys have practically

equipped the school. They manufacture public school furniture, bookcases, desks, tables, blackboards, sewing desks, and do electric wiring. The hours are from 8.30 to 3 with half an hour for lunch. The summer vacation is very short. The time card system is used. In March, 1909, an elementary factory school was started to fit for this, and a school for girls will follow.

It would seem to be a self-evident proposition that where boys are segregated in *reformatories* or elsewhere because found intractable at home or in school, the very first duty owed them is that they should be rendered capable of earning a living when they leave, and that some bases of character be taught. The *Lyman School* for such boys, dedicated in 1848, has been 3 times burned, until the congregate has been changed into the cottage system with an average of 30 boys each, while restraint has grown less and the punitive features are weeded out and there is less to distinguish it from a farming or industrial school. The boys have laid bricks, made doors and windows, have anticipated some of the features of the George Junior Republic, have their own currency and bank, learn to do farm work and, although committed for minority, may work their way to supervised freedom. It is even claimed that, although some change their names upon leaving and are lost, the alumni as a whole are proud of their relations to the school and like to keep them up. Now nothing would seem more obvious than that wherever a state takes extra control and responsibility, it also has extra duties. In many institutions of this kind in this country this is not felt. A large part of the time of the boys is spent merely in housework: washing, caring for rooms and otherwise performing utterly unskilled tasks which in no wise fit them for useful positions when they leave. Here where all conditions can be controlled, it would seem as though such institutions might in some respects be models of industrial training and could even be made experiment stations where methods could be tried out. Many of these boys have exceptional energy, and they seem to me to be more individualized than average boys. This involves the duty of studying each with exceptional care, in order to find out the proper vocation for each, so that he may not only be trained for it but be steered to it when his training period is ended.

W. H. Roe and his wife are conducting a unique *Mohonk Lodge* in Oklahoma, built somewhat Indian-wise, but with stove, cots, games, hospital, and designed to be a center for the preservation and development of Indian native arts, for which a market is provided. Buckskin, sheepskin, moccasins, dresses, dancing skirts, cradles, tepee cloth, gilt work, curios, and frank adaptations of genuine Indian work for modern life such as golf belts, purses, and picture frames, are produced. They work, like the Arapaho and Cheyenne women, with awls and fibers rather than with needles and thread. Attention is given to the symbolic designs of the Indians which are secret and hard to get. At night the Indians gather and play games.

A mission church near by induces some to take the "Jesus trail." Some relapse to drink, gambling, or the mescal habit; and the sun dance, which lasts 6 weeks, often wastes vigor, money, and morale acquired with great difficulty.

Perhaps the best *school of horology* in the world is that of Besançon (1897), the great watch and clock center of France, which was established in connection with the university in that place and authorized to confer upon its best graduates the diploma of horological engineer. There is a chronometric observatory which treats of various motors, escapements, synchronization of pendulums, compensations, etc. There is also a practical course which involves polishing, finishing, making cogs and wheels. Throughout there are 7 courses with periods of daily work. (Compare those at Waltham, Mass., and at Elgin, Ill.)

The *Lewis Institute* is a polytechnic school for both sexes, giving the degree of Bachelor of Science in Mechanical Engineering, the title of Associate in Arts and an Academy Certificate, representing 4 and 2 years' college work and 4 academy years respectively. There are four departments: mechanical engineering, mechanical arts, domestic economy, liberal arts. Day students pay a registration fee of \$5 and tuition of \$20 a quarter. The rate for evening students is \$5 a term of 10 weeks, 2 evenings a week.

The *Cleveland Technical High School*, opened October, 1908, has a very fine building in Gothic with a girls' and boys' school organized separately in the building. It is open to pupils from any part of the city. A day has 9 45-minute periods from 8.25 to 3.25. School is in session the year round in 4 quarters of 12 weeks each.

J. J. Eaton¹ (formerly superintendent, Philippine School of Arts and Trades, now Director of the Textile School in Ludlow, Mass.) tells us that *industrial education in the Philippines* is an exceedingly intricate problem. Ironwork does not enter into the native houses, which are chiefly built of palm and bamboo, the chief tool used being the bolo. Ten thousand dollars was available for this purpose in August, 1901, when the first contingent of American teachers arrived. As there was no equipment they were formed into a committee to investigate the industries of the city, chief among which were cigar and cigarette shops. There was much marine construction and repair, and skilled labor was mostly performed by Chinamen. Establishments had to keep about 50 per cent additional men on their rolls because the native is disinclined to work a full week. Plumbing was chiefly unknown. There were few good blacksmiths or wood makers, while wood carving, jewelry, tailoring, seemed to show that the native could perform good work if it pleased him and was not too hard. Much stress was laid on

¹Manila Trade School. *Annals of the Amer. Acad. of Pol. and Soc. Sci.*, 1909, vol. 33, pp. 89-96.

English. The buildings the Spaniards erected for their exposition in 1895 were the first homes of the school, simple one-story houses of wood and plaster with tile floors, a mile from the heart of the city. About all tools and supplies had to come from the states. For months most who entered left after a few days. They seemed chiefly to want English and qualifications for clerical positions. English seems to have been better learned in the center in a few years than Spanish was during 300 years. More than half who first entered had been rejected from other schools; many came from curiosity. Drawing was a favorite course. The government rated success by the numbers on the rolls. Special courses in telegraphy were needed and were successful from the first. Shop work with lathes, saws, planers and drills slowly grew in popularity. The course was 4 years. The Chinese excelled. Three hours a day must be spent in the shop, with 1 additional hour for drawing, and 2 for academic work. Shop work increased every year until in the fourth year all must be spent in the shop. The Spaniards had charged for material and tuition. This was remitted and there were fewer restrictions. In 1905 the *Manila Trade School or Philippine School of Arts and Trades* was reorganized. Telegraphy was given to the commercial high school. The requirements were much the same as for admission to technical and high schools at home. There were no pupils under 14, and no girls. Efforts were made to secure practical work for all worthy pupils during the summer. Basket work and rattan were added. A marine course is needed because many boats, inter-island and others, need to be repaired here. English has been made a condition of admission. Evening classes have not been successful. At one time the city of Manila appropriated \$30,000 for a trade school, but the city government failed to co-operate because the acting secretary of public instruction thought pacification, a judiciary, and good roads should have preference. Agricultural training is greatly needed. Each town often has a special industry. The manufacture of hemp products, the best in the world, is carried on in the crudest manner, and there are unlimited possibilities of making these marvelously long fibers into twines, ropes, cloth, hats, while pottery work should be developed.

C. W. Cross (superintendent of apprentices in New York State) describes the *apprentice system on the New York Central lines*. They have found it very difficult to secure foremen, and most roads have no system for recruiting good men.¹ The system is summed up as: 1, close supervision and instruction of apprentices in the shop by an apprentice instructor; 2, a school conducted by the company during working hours in which mechanical drawing is taught practically and where the apprentice is paid for attendance; 3, a course of problems to be worked out on other time. This follows in many respects the educational system of the British Ad-

¹ See I. M. Bashford. *American Engineer*, July, 1905.

miralty, which has trained most shipbuilders in Great Britain.¹ Large railroad systems now make it possible to work out courses of instruction. The pyramid stands on a basis of the rank and file. At the beginning there were 12 shops, each of which had from 20 to 74 apprentices, although work of some kind had been carried on locally at 4 points.

Some 35 years ago an apprentice school was started at the Elkhart shops on the Lake Shore and Michigan Southern, with evening sessions, chiefly for apprentices, but which anyone could attend. In 1901 these were made compulsory for apprentices, who organized an association, with fortnightly meetings and reports by committees who had seen other shops. In 1886 evening work was started at the Jackson shops on the Michigan Central. This was at first evening, but was changed to 5.15 to 7.15 P.M. Each class met once a week from the first of November to the first of May, attendance being compulsory. In 1904 an apprentice school was organized at the Oswego shops of the New York Central, classes meeting 2 hours 1 day each week directly after the closing whistle blew. Pupils must go, but were paid, and this made severe discipline possible. The apprentice department of the New York Central was inaugurated in March, 1906, at the West Albany shops. It is controlled from the Grand Central Station, New York. The boys come in contact with shop conditions from the first, each larger shop having 2 instructors, one in drawing and one in shop work, all being arranged to allow each to progress as rapidly as he can. So close is the personal touch that no examinations are held. Often there is a long waiting list. Many older men come in to brush up and thus become familiar with the company standards. The schoolrooms, with plenty of blackboard space, must be near the shop buildings to avoid loss of time. There is now an excellent building at Brightwood on the Big Four, erected for the purpose, where classes meet twice a week for the first 2 hours in the morning. In the New York Central school there are now 667 pupils and extension work is being developed. There are usually gradations of classes. Very much of the work is drawing. Text-books are not practicable, but problem sheets are used. Some instructors call at the boys' houses if they are absent. The instructor must see they are changed from one class of work to another to give them broader views of the business. Supplies are purchased in large quantities and usually given, although the boys provide their drawing apparatus. Problems are based on gearing, steam distribution, valve setting, etc. By better opportunities the better class of boys is attracted, and the larger the comprehension the greater the interest. There is far less spoiled work.

N. W. Sample (superintendent of apprentices) describes the system at the *Baldwin Locomotive Works, Philadelphia*, where a

¹ See M. W. Alexander. Plans to Provide Skilled Workmen at a meeting of the American Society of Mechanical Engineers. December, 1906.

scheme of indentured apprenticeship which had fallen into disuse for 25 years was reorganized in January, 1901. There are 3 classes: first, boys of 17 who have a good common school education and who bind themselves, with the consent of their parents, to serve 4 years, attend, obey orders, and recognize the supervision of the firm over their conduct out of as well as in the shops, and to attend the night school during the first 3 years of their apprenticeship. The second class includes boys of 18 who have a high school training and who promise to serve 3 years and to attend the night school the first 2 years. And the third class is made up of men of over 21, graduates from colleges and technical schools, who want practical shop work. The indentures of the first and second class provide for attendance at the public school, although many of them go to night schools. Each must make formal application in his own handwriting, stating his course of study, and submit to a 30-days' probation, and when indentured is paid a fixed wage per hour, increasing each year, with a bonus of \$125 to the first class boys, and \$100 to the second class boys, if they complete the course. In the first two classes apprentices are not permitted to work on the same process more than three months or in one shop or department more than one year. The departmental change is every six months. A complete record is kept of each boy's conduct and service, which is sent to the foreman when he is transferred. The last period of each apprentice is spent in the erecting shop. Attendance is, of course, obligatory. Apprentices come from all parts of the country. Three years after the first indentured apprentice completed his term there were over 200 graduates, 50 of whom occupied responsible positions. Now it is not necessary to go outside for any kind of talent.

M. W. Alexander describes the apprenticeship system of the *General Electric Company at West Lynn, Mass.* He says that the recent unprecedented industrial prosperity has very vividly revealed the lack of skilled workmen, and when the revival of business comes again this will be still more acutely felt. This company has special training rooms for the preliminary practical training of apprentices. All, when accepted, must serve a trial period of 2 months, and then those who show native ability and a good moral make-up are permitted to sign an agreement which is based rather upon honor than on law. Boys are made self-supporting, and those selected receive \$5 a week the first year, including the trial period, \$6.50 a week the second, \$7.50 a week the third, and \$9 a week the last year. At the end of the course they are given a "certificate of apprenticeship" and a cash bonus of \$100, and the best are invited to remain with the company, receiving usually \$2.50 or \$3 per day. The machinists' training room now covers more than 10,000 square feet, with over 100 representative machine tools. The training room for pattern makers occupies 2,000 square feet. While most of the machines are of the latest pattern, some are those relegated to the scrap heap. This prevents injury to high-priced tools by inexperienced boys, and

gives opportunity for repairing. At the beginning each is under the direct supervision of a superintendent of apprentices, who thus studies the boy's capacity and character. Some require $1\frac{1}{2}$ and others 3 years to pass through the training room. They round out their knowledge and skill on a variety of work. Then some specialize on that for which they are best fitted. The best are given opportunities to act as temporary instructors, the general instructor often coming in to supervise. The young masters put forth their best efforts to impress the boy pupils with their own knowledge. It happens that some teach those who have been longer in the training room than they themselves. This shows, however, that capables are not held back. This instruction is given during the regular working time, and the apprentices are paid the same wage during the school hours as they would receive while working at the bench or machine. While instruction is given in mathematics, physics, technology, and mechanical drawing, the problems are practical and selected from daily factory life to teach boys to think for themselves. "Through practice to theory" is the maxim. Tool designers should be tool makers and *vice versa*. Groups of 15 form a class. Some receive instruction from 7 to 9 A.M., others from 10 to 12 A.M., or during the first or last part of the afternoon. Of 76 apprentices over 50 are at present employed by the company.

Professor R. K. Duncan¹ has realized a *unique coördination of chemistry and industry*. A laundry association gave \$500 a year for 2 years for a chemist to investigate modes of saving people's linen. An oil firm established a temporary fellowship to study the thyroid and suprarenal glands of fin- and hump-back whales of Labrador to find the age of whales in which these were largest. The association of bakers has contributed to have another problem solved at the University. One fellow works on the constituents of crude petroleum; another to improve the enamel of lined steel tanks; another is at work on new utilities for Portland cement, at \$1,500 a year, 10 per cent of all patents and 5 per cent on all processes resulting therefrom; another has \$2,000 a year for new utilities for ozone; another is working on a new source of diastase; and another to utilize the waste of petroleum. The work began with the study of the optical properties of gas and its chemical composition. The firm supplies the money and the student gives all his time to investigate the scientific problem designed to be of value to the business. He only gives 3 hours a week instruction; is appointed by the chancellor and the professor; is paid in 10 monthly installments. All discoveries belong to the company furnishing the funds; the fellow, however, receives 10 per cent of the net profits and is regarded as the inventor. He may in the end engage himself to the company for a term of 3 years; and if there are differences, the chancellor arbitrates. The research may be kept a secret for 3 years. Duncan

¹ *Western Chemist and Metallurgist*, Nov., 1909, No. 11.

began by a study of manufactures involving chemical processes and found chaos, waste, and utter disregard of scientific knowledge which he ascribed to wealth of raw material, excessive tariff, and great talent for business, which supplements waste in factories by shrewdness in making markets. A few have chemists, but bad facilities and worse libraries. The fellow gives a complete account of his hours of investigation, signs a legal waiver of all pecuniary interest in the results and a pledge of secrecy.

L'École du Livre, in Paris, was founded about a quarter of a century ago by the city of Paris for instruction in everything involving bookmaking. It was prepared for by its founder, M. Hovelacque, by years of study and travel. It is a day school, from 8 to 6, with 2 meals; and receives boys of 12 who have finished the lower primary. About 100 were admitted first on a competitive examination from 300 applicants. There are 17 courses in all, including type casting and setting, drawing and engraving of various kinds, etc. Only those elements of chemistry are taught which are necessary for ink making, photography, etc., the science being entirely subordinated to its application. The first year all studies are hastily passed through and the pupil then concentrates along the lines of his tastes and aptitudes. The institution has a large and admirably appointed building on the Rue Vauquelin. Instructors of the school were appointed by competitive examination. It was quietly inaugurated with very little talk and no theorizing, but on the idea that modern trades are narrowing and that a workman is far better if he knows something of all parts of his trade and all its larger, scientific, social, and hygienic bearings. The plan is very similar to that of the magnificent photo-engraving school at Vienna, the city typesetting school at Barcelona, and was related to the admirable Plantin Museum of all the tools and processes of bookmaking, until this was excelled.

In France there are *vintner schools* and courses for those who cultivate the vine, and wine makers' courses for those who manufacture the many different kinds of wine. These are matters which epicures discuss with great zest and edification for each other's benefit. Processes by which Moselle, Bordeaux, Port, Claret, Sauterne, Champagne, are made are elaborate and diverse and require a high degree of intelligence as well as special skill and training. Schools also for the education of beer and ale makers have been conducted in Germany. The processes, too, by which whisky, and especially brandies, cognacs, absinthe, and the manifold cordials are made have also been curricularized. Some of these shade over into the preparation of drugs in the education of apothecaries and thus are annexes. Southern France has at least two interesting courses or schools for perfumery makers, in regions where acres of roses, pinks, violets, etc., are found. There is also some instruction in the methods of making mineral waters and light summer drinks, also mineral and animal as well as vegetable perfumery: musk, cologne,

mints, etc.—all these are taught. In several places in Europe are special courses for dairymaids, and for cheese and butter makers. Schools for the training of policemen, or *Polizeiwissenschaft*, and also for pilots, are most highly developed in Germany. Piano tuners, glass blowers, spinners, tax collectors, bootblacks, newspaper sellers, sheep shearers, fishermen, makers and menders of umbrellas and wooden shoes, judges, journalists, librarians, cash boys, undertakers and grave diggers (Belgium), housewives and prospective parents (suggested), deaconesses, aëronauts, *croupiers* (Monte Carlo), schools for old people, for treating prevalent diseases, language reform, Esperanto, barkeepers, chiropodists, rat catchers, even pick-pockets and thieving, have their teachers and learners, and all are of genuine pedagogic interest and suggestiveness.

One of the boldest, most comprehensive and interesting of all the new departures in this field is the now famous *Munich system*, which has transformed its continuation schools into elementary technical schools for apprentices. In 1900 schools were opened for butchers, bakers, shoemakers, chimney sweeps, and barbers. In 1901 followed schools for wood turners, glaziers, gardeners, confectioners, wagon-makers, blacksmiths, tailors, photographers, interior decoration, painter's material. In 1902 came schools for waiters, coachmen, painters, paperhangers, bookbinders, potters, stove-setters, watchmakers, clockmakers, jewelers, gold- and silversmiths. In 1903 schools were opened for foundry men, pewterers, coppersmiths, tinsmiths, plumbers, stucco workers, marble cutters, wood carvers, coopers, leather workers, and saddlers. In 1905 came schools for business apprentices, type-setters, lithographers, engravers, building iron and ornamental iron workers, machine makers, mechanics, cabinetmakers, masons, stonecutters, carpenters. There are now over 40 of these, besides 3 facultative continuation schools for masters and helpers. The former are compulsory and must be held sometime between 7 A.M. and 7 P.M. The latter may be either day or evening. In Germany great economic and even moral advantage is claimed by utilizing Sunday afternoon for such and other school work. P. Kreuzenpointer¹ says that if Pennsylvania had as many trade schools in proportion she would now have 1,000, and this country at large about 30,000.

¹ *An Extreme View of the Need of Industrial Education. Amer. Machinist, May 30, 1909.*

These schools are usually held 2 afternoons per week, with sessions from 3 to 4 hours each and with a term of from 5 to 6 months per year; the length of the course is 3 years, and the age of the boys is from 13 or 14 to 16 or 18. Attendance at these schools usually ranges from 20 to 100 pupils each. The trades with which most of these boys are employed are always represented in the board of control of each school. They, too, furnish most, if not all, of the material used for instruction; and members of the trade organization do much of the practical part of the teaching, although the more progressive school-teachers have spent much time in studying one or more trades. Religion—Catholic and Protestant—is always taught. All the arithmetic, e. g., is immediately concerned either with the details of the trade or with the practical life of the boys. The same is true of the language work, the elements of science, etc. The above schools represent the chief industries of the town except beer, higher instruction in the manufacture of which is given elsewhere. Munich, although a city of over half a million inhabitants, lacks great business enterprise in the American sense. The movement was inaugurated by the superintendent, G. Kerschensteiner, and is described in a prize essay¹ which seeks to answer the question, How can we train boys for citizenship and social life most effectively during the interval between their graduation from the elementary school and their entrance into the army? He here advocates the necessity of training young people to be self-supporting as primal, and also that the teens are the most important of all ages of life for morals as well as for skill, and maintains that the true education at this stage was, and always should be, active. Bavarian law compels employers of boys to send them to these schools where they exist, so that attendance is compulsory for 6 to 12 hours a week. The boy without a job must attend the dwindling old continuation schools. The city often gives teachers leave of absence to learn some of these trades. The best citizens and tradesmen meet on the committees and the children are told a great deal about everything that bears upon the trade in question. Some of these schools have a preparatory year for those who have only passed the seventh grade.

The pedagogic ingenuity that has been applied to this problem in Munich is great. Every sum, account, bookkeeping exercise, every language lesson or composition, all the elementary geometry, physics, chemistry, etc., is given a vital vocational form, which goes to the very heart of the actual business to a degree that only Booker T. Washington has yet realized here. Thus the courses differ with each school. The chemistry of the photographer, for instance, has very little in common with that of the baker or the leather worker.

¹ Georg Kerschensteiner. *Staatsbürgerliche Erziehung der deutschen Jugend*. 3te Auflage. Erfurt, Villaret, 1906. 78 p. See also his *Grundfragen der Schulorganization*. Lpz. Teubner, 1907. 206 p. I am here under much obligation to the author of this system for its literature, programs, and other information.

History and geography are intimately bound up with the occupations. Trade honor, law, history, organization, are taught. The lives of successful men in each calling are told and their lessons drawn, and the qualities that gave them prominence are pointed out. The relations to other trades, to sources of supply, customers, to the city and its ordinances, are taught in a way to foster both local pride and respect for their calling. The city chiefly controls these schools, which are under the direction of the board and the superintendent. Labor questions, of course, cannot arise under these conditions, for the boys are learning their trade outside. No true pedagogue can read the rather detailed and systematic programmes, reports of each of these schools, etc., without growing interest and admiration, not to say fascination, if not, indeed, with a strong desire to take each course himself. One feels that a barber, butcher, baker, cobbler, and the rest, may be an educated gentleman if he masters his craft. The chimney sweep, e. g., is taught about fireplaces, hearths, stoves, steam, and other systems of heating, brick, stone and other building material, flues, fluted and complex chimneys, their tops, ventilators, the physics of air currents and the history of house warming from Greece and Rome to our day; he knows all the tools and problems of his trade: the chemistry of soot and ash; does problems in temperature and fuel economics, fireproof construction; studies roofs, mortars, devices for reducing smoke and gas, fire extinguishers, something of house and especially of chimney construction, laws, insurance, police regulations, the use of pitch, plaster, waterspouts, etc.; there is considerable instruction concerning duties, deportment, civics, etc. Surely no boy in the later teens who has mastered such a course can be called uneducated. It may also here be mentioned that there is a large continuation school for girls in two divisions: one for household or domestic, and the other for business, training.

The impression from the study of these German schools, which in the last few years have attracted thousands of visitors to Munich, may perhaps be enumerated and described as follows: first, one realizes the great wealth of culture material which can be vitalized by vocational interests. These curricula contain each a comprehensive body of facts, laws and principles that are of both humanistic and occupational value. The broad outlook and the vast surface of contact between each calling and the life of the community and the world appear. It is surprising to see what a wide range of knowledge can be made to be of direct utility, if only the right connections are made, how intelligent a successful artisan needs to be, and how wide the range of information, not to say learning, that can be turned to direct and imme-

diate practical account and that has here been utilized for pedagogy. This great fund of what may be called expert knowledge in the minds of intelligent and skilled workmen, of the extent and value of which they are unconscious, the very fact that the zests and accomplishments which they live by have been discovered by teachers and turned to educational account—this gives them added self-respect, as it should. They see that schooling is not the three R's alone, but that, if their practical lore is curriculized, it greatly augments their own sense of its value, to say nothing of enriching the school course, the action of which has been not unlike that of a new railroad through lands hitherto inaccessible to markets in increasing the value of its acreage.

The preliminary survey and the courses that resulted increased the domain of pedagogy by opening these wide fields to which ever since the dawn of civilization most men have devoted most of their time and energy. What they have cultivated here has hitherto met with scant recognition, perhaps with contempt, by teachers from Plato down. Curriculized knowledge has hitherto run in such narrow channels that it has cut too deep to vivify the plains on either hand, which have become arid wastes. But now the stream bed is overflowing and its irrigating effects are already manifest. Indeed all educational problems are from this point of view vastened, until education seems entering a new era with possibilities for not only national but human effectiveness greater than we have ever had reason to hope for before. We find here, too, a growing belief that the world is again likely to learn what real teaching is and can do.

Once again we learn from many observers and reports how intensely these pupils are interested and how passing well these chosen master workmen with no training in the art, can teach, so that trained pedagogy has a great deal to learn from them. Put a few bright boys in the earliest teens and a capable man in the forties who knows his business and loves it together, and we have perhaps the very best possibilities for teaching and learning, which the world to-day is in danger of forgetting. This is just about the age difference when normal fatherhood feels the pedagogic instinct most intensely. It is on both sides the age when social heredity does

its most and its best, when all kinds of tradition and transmission are most active and effective. The master here does things and thus sets copy for this most imitative age. If he talks, it is to explain his acts or deeds. A good artisan prates of only what he knows, and does not wander into fields of knowledge he cannot command. Thus he speaks not only with great directness but with authority, and illustrates, or can do so, all he says. To this the very nature of the boy, wild though his instincts may be at this age, responds by a very high degree of docility. The very boy who revolts against a jejune teacher and deserts a dry course, follows the man who can tell and show him what he wants to know, like a dog his master, and is hardly less responsive to suggestion. This kind of teaching is succinct, pointed, curt, epigrammatic, its language is yea and nay, it admits of no argumentation, but commands, compels, does not coquette for juvenile favor or effervesce with the gas of method. Teaching under such conditions is indeed masterly, because and in as much as it is not schoolmasterly. It is not windy with words, but coercive of all that is in the boy, so that there is no part of him left to object, and because such authority he loves.

It is surprising to note, too, how many of these Munich boys' parents are in the same trade the boy is entering. Thus this system cannot fail to enhance respect for the father's calling and therefore for parental authority. The boy here is not turning away with disenchantment or disgust from his father's vocation, is not certain that he can do better in some other, and does not wander about and waste the most precious years of his life in finding a good opening elsewhere, to become only a bungler in the end because the years nature designed for apprenticeship were not utilized. Boys thus at any rate escape in the later teens the dawn of the sad and paralyzing sense that it is now too late. Under this German system, the boy becomes self-supporting and marries earlier and so probably has more children, is doubtless more content, feels more complacency if not pride in his calling, and is more effective in it. The boy who deserts his father's trade must feel that the latter has been more or less of a failure in it, that the experience and deftness that are the chief products of his life are not valuable; while if he follows it, it is because the par-

ent seems to have made a winning fight in the battle of life, so that he is accepted and not repudiated as a special teacher.

Finally, stock school matter and methods are almost stationary, not to say stagnant. Much now is as it was generations ago, and some things as they were centuries ago. Industry, on the other hand, is very rapidly changing and, if not giving us a new world every year, is transforming everything at an ever-accelerating rate. Business and trade are always finding new ways, discovering new fields, transforming, superseding old processes, making inventions, discoveries, with the number of new patents increasing each decade in almost geometrical ratio. This is not the same world industrially or intellectually that middle-aged men were born in. Progress is now almost at breakneck speed and is constantly casting many things once supremely worth knowing and doing as rubbish to the void. When the slow-jogging school is attached to industry and trade in a way that really helps pupils to get and keep abreast of things as they are, there is of course always a strain and a jolt, as if an old stagecoach were caught by a rapid trolley or auto. To be and keep modern in the industrial field means perpetual advance, a readiness to change at any time and at any point, and to realize that it may to-morrow be necessary to go back and start all over again. Thus it is no wonder that those pedagogues who cling to old and routine ways are afraid of push and go, and prefer to row about in shallow eddies rather than to hoist sail and push out into deep water and central currents. Not a few of these just now look upon the tendency toward vocational training with alarm, for their pedagogic slumbers are perturbed by anxious and disquieting dreams. One of them lately confessed to me, almost in a whisper, that there was little doubt that now there was a widespread, secret conspiracy on the part of captains of industry to capture the schools and subordinate them to their interests. It does seem at first view to joggle the recapitulatory theory which holds that a child must repeat, if but rapidly, the long developmental history of the race, because here the problem is to take the very latest from the very forefront of the advance line and pass it quickly back and down to the children and, instead of leaving them in some past stages of civilization, rush them to the fore.

But those of us who hold to the phyletic view can, and indeed must, also advocate this ultra-precocious modernism, because it is only a part of education which, to be sound, must be at the same time firmly anchored to the past, so that no good thing in it shall be lost, and also wide open to the future. Adjustment to both these claims, when made complete so that each is seen, felt, and given its due, is the best training to sanity and expansion of soul, just as in religion the optimum combination is the most scientific, critical, individual insight coupled with the oldest and deepest racial feeling. Either without the other is dangerous—the old if unbalanced by its opposite makes for stagnation, the new alone for shallow neologism.

These industrial new steps to date mean advance from the old uniformity because production is extremely diversified and more and more so. With a core of identical matter, specialization in education comes ever earlier and branches ever wider. Even in the grades, there is more or less in each course leading to one destination that has nothing in common with any other. We have sinned greatly against the diversification and the wide range of variation in the soul itself; have assumed that there is one best way when there are in fact many, each one best for a certain type of mind, interest, or calling; and therefore each more truly educative than any other for those it fits. Industrial education thus brings a far greater good to a far greater number, and so gives greater aggregate advancement and development. It picks up those who had ceased to grow and spurs them on again. It saves innumerable arrested and aborted life careers; it is all things to all men; it brings down to the grades all the merits of the elective system, greatly enhanced and enriched, since trades are more numerous than academic departments; it quickens faculties that would have slumbered on indefinitely; it should teach the teachers of the old régime that their little kit of knowledge and skills which constitute their craft is only one among scores of others, each having just as much really human and educational value as their own, if not more. It has already sent hundreds of the brightest pedagogues to the shop, store, and factory to study the new things they need to know to guide this new movement. They realize that business people

and craftsmen are always struggling to solve new problems in original ways, spurred thereto by the stern necessity of livelihood and competition. The motives, too, of charity and general weal are thus added to their pedagogic motives. They feel themselves a more vital part of a great nation at work and not sheltered and aloof from it. Thus, too, the school will regain its now losing hold on public appreciation and the good will of taxpayers, and the latter will surely if slowly learn that all that has been done for the public school so far is but the beginning of the vastly more it will pay to do, and that betimes, in conserving the most precious of all capital and raw material: viz., individual workmanly knowledge and efficiency, till we shall come to understand that the best workman is the best man, and that health and deftness of body and soul are the most precious parts of the industrial resources of the country.

The psychological beginnings of the movement toward industrial education probably go back to Senler's mathematical and mechanical *Realschule* in Halle, 1708, or rather to the first *Realschule* of the present type by Hecker in Berlin, 1747. This great movement, which the world knows by heart, had sound scientific foundations. Soon after the war of 1870, which marked a new dispensation in this field, Germany began to devote her chief educational endeavors to industrial lines of education, in order that, although a poor country, she might develop national power along manufacturing and commercial lines. Now, her leadership here is undisputed, and especially in the field of applied chemistry enormously profitable. At the *Badische Anilin- und Soda-Fabrik* alone, from 100 to 200 university trained chemists and engineers are employed to short-circuit and economize processes; another has 148, another 145, another 129, another 128 chemists.¹ Some 19 years ago the English technical college at Finsbury was the best equipped in electrical technology, perhaps surpassing all others in Europe, but this is now far exceeded by the institutions at Darmstadt, Stuttgart, and Charlottenburg, the latter costing \$2,500,000 and opened in 1884 with Helmholtz

¹ E. D. Howard: *The Cause and Extent of the Recent Industrial Progress in Germany*. Boston, Houghton, Mifflin, 1907. 147 p. See p. 60 et seq.

at the head, a fusion of an architectural academy founded in 1799 admitting boys of 14 and a technical school of 1821 which admitted boys of 12, both being under the ministry of commerce. These had declined, and now the new institution of vastly higher grade is placed under the ministry of education, receiving only those who have graduated from a first-class *Realschule* or *Gymnasium*. Fabian Ware says England is to-day 50 years behind this and cannot equal it until its secondary education is radically reconstructed.

One reason for the success of industrial education in Teutonic lands is a pan-German law forbidding the employment of all children under 17 in factories and workshops, leaving thus 3 years free. This was aided by the law of 1901, which declares that all workmen under 18 may attend official continuation schools and that local councils may make this obligatory, as Saxony has done. Attendance is also urged as a public duty for both military and commercial reasons; and love of country must precede individual liberty here. The Würtemberg law, operative in 1909, compels all localities having for 3 years 40 youth under 18 engaged in industrial or commercial pursuits to establish a school for them and to maintain it as long as the number of such youth does not fall below 30 for 3 successive years. The term "industrial and commercial pursuits" is made to include factory hands, day laborers, clerks, errand boys, and thus is given the widest scope. The opportunity to attend is now given day times, rather than evenings, Sundays or holidays, as before. Each must have at least 280 hours of schooling per year. *Gewerbe* schools are usually found only in large industrial centers, perhaps besides or with the trade schools, the magnificent textile school at Crayfield being a good type with its evening, Sunday and day classes, most of those students having finished secondary courses. The training is in every branch of weaving, dyeing, finishing, and spinning. There are now 13 Prussian schools dealing with textiles, varying with local conditions, e. g., cotton only at Gladbach. The Prussian especially has a horror of short cuts, wishes to be thorough, aims at the greatest collective ability and to avoid stultifying the national aim by individuation as in France.

Under this system the increased efficiency of German workmen has grown rapidly. Our Consul-General Mason at Berlin says that our reliance upon superficial education and the natural adaptability of young men will, if pursued, neutralize most of the advantage which our country enjoys through its natural resources and advantageous geographical position for South America, Mexico, and the Asiatic trade. The so-called "American danger" in Germany has dwindled so that the fatherland has little to fear from our competition in the field of manufactured goods. It depends more largely

on export trade and there is a natural national ambition to "best" the foreigner in his own field. This highly trained labor costs less than half what it does here and the laborer is tractable and works longer. Schneider says: "The efficiency of the American workman has decreased during the last ten years." Snowden in his "Industrial Improvement Schools of Württemberg" says that in the single item of machinery and tools, Germany's sales to the United States doubled in the 5 years ending 1905; while our sales to Germany in this line totaled but $\frac{1}{3}$ of what they were 5 years ago. In the same time Germany has doubled her exports to England of finished products and receives only $\frac{1}{3}$ of her former imports. In the machinery and tools she exports to Sweden, Denmark, Argentina, and Chile she has doubled, to China quintupled, to Canada quadrupled, and to Portugal tripled what she sold them in 1900. A pessimistic writer reviewing the situation says: "Ten years from now it will not be a question whether we shall have an eight-hour day or not, but whether there will be any work for all our industrial army." The German stress is laid not upon developing leaders, but upon raising the average of collective efficiency; and in this, according to the verdict of most experts, she is right.

With characteristic thoroughness, Germany would begin nearer the bottom of her educational system, and lay deep and strong the foundations which are represented in a type of the *Volkschule*, connecting with the kindergarten paper and cardboard tents, ladders, squares, rings, windmills, baskets, disks, some of which illustrate, a little later, fractions and geography, with the aid of paste work, swords, kites, frames, bows and arrows, boats; molding clay and sand with wooden tools that harden in colors; bricks are notched, made into arches, pyramids, hexagons, plinths, coping stones, rough tiles, spheres, etc. Then there is work in wood pulp, calico for binding, edging, glazed and other papers, ribbon for portfolios, glue for album cases, paint boxes, pocketbooks; also unbroken rings, money boxes, letter holders, and caskets. The common tools: hammer, tongs, pinchers, saw, file, gimlet, chisel, and plane are used; and for woodworking, a cooper's bench of a peculiar pattern, used also by wheelwrights with a foot clinch, has been devised; and grinding and sharpening of tools is thought a valuable part of education. In Leipzig, too, picture frames, ink stands, key holders, spools, winders, shovel handles, harness, pegs, barred gates, milk stools, sawhorses—all for use, are made. Carving comes next and is rather elaborate. Bent wire, although much opposed in Germany, has often served to introduce metal work. Thus are made buttonhooks, mathematical slides, bill files, Segener's wheel, centrifugal ring, magnetic needle with stand, clamps, tunnels, cups for measuring fluids. Molding also had to overcome much opposition at first in Germany, but has gained great favor and at Jena goes naturally along with teaching of civilization in the lowest gymnasial classes, where the school bench is by a very simple device transformed to a work table.

Very different is the story of this movement in this country. Dr. C. M. Woodward,¹ who if not the father of *manual training* here has done more than anyone to diffuse it, ascribes the place of honor to John Boynton who, in 1865, laid the foundations for the Polytechnic School of Worcester, Mass., to provide instruction in branches essential to life, but not usually taught in public schools, with a machine shop on a commercial basis, with 20 branches, and skilled workmen to instruct. C. O. Thompson with great originality developed a unique combination here of machine shop and engineering school. This was before Delafosse developed the famous Moscow method. Then came the Stevens Institute with shops in 1871; the St. Louis movement, somewhat based on that of Russia, in 1872, which stressed carpenter's and mechanic's work with drawing, etc. At the Philadelphia Exposition of 1876, which marked an epoch here, the Russian method had a remarkably clear and definite exhibition, and Professor J. D. Runkle promulgated its methods and in 1887 opened a school of mechanics arts. Then came the St. Louis Manual Training School in 1879, reducing for the first time in this country the age of admission to school shops to 14, with a 3-years' course, and hours equally divided between study and manual training. This method lays great stress upon tools. Then came, in order, the Baltimore public manual training high school in 1883; the Belfield school at Chicago in 1884; the Scott manual training school at Toledo the same year; this movement was also taken up by the College of the City of New York; and the Philadelphia manual training high school was opened in 1885; and from there on the movement has spread very rapidly until there are now about 150 secondary schools that give more or less of this work and about 30 known as manual training, technical, or mechanics arts high schools. The time given to practical subjects varies from 4 to 12 hours a week. Some depart more, some less, widely from the old cultural ideal. Manual training is now given in more than half the 1,300 city school systems of the country.² Nevertheless, these schools are too isolated, unpractical, and unsocial with too little practical content. These manual courses are rather highly curricularized with precise steps, standards, logical order, great insistence on precision and stages in the use of each of the 12 tools which are stressed with hygienic justification of all the characteristic movements and attitudes and are generally taught with enthusiastic belief that they are at once a grammar, quintessence and open sesame to the trades, that they make them as purely cultural and as near a liberal education as is possible, although in this respect they are less sophisticated and have a much larger proportion of matter to method than does sloyd. It was certainly a pedagogic triumph to have

¹ The Manual Training School Boston, Heath, 1887. 366 p.

² A. W. Richards: *From the Practical to the Intellectual in the Shop*. N. E. A. Report, 1902, pp. 550-558.

passed the challenge of the culturists and allayed their suspicions of things useful. Sometimes these manual courses have been directed by dyed-in-the-wool classical teachers, as if in order to deparate them of anything but purely cultural influences. They are very often taken by motor-minded boys, who do not do very well in their studies, but can use their hands. There is usually no vital contact with the market, for nothing is made to sell, or with the most vital needs of boys, for almost never is the plain, obvious law of common sense observed that only the end can sanctify the means. Some have therefore even urged that young children should make a series of toys, and older children a series of simple physical and other scientific apparatus. This, it has been said, will quicken the intellect and give the right motive to work as nothing else ever tried can do. Indeed, this general principle of the end inspiring the means has been demonstrated over and over again to the satisfaction of everybody but purblind pedagogues, who still persist in having boys and girls make joints, links, and a graded course of objects of no use to a living soul, but designed only to show the consummate perfection of the system. If a little more advanced, boys make tables, cabinets, chairs, book shelves and things that the teachers think they ought to be interested in, but which are pretty well out toward the peripheral limits of their actual zests instead of at their very center. That manual training fits for most trades is, in many cases, a preposterous delusion. Over and over again, manufacturers have discriminated against boys with this training, because they had so much more to learn, the importance of which they did not believe in, because they must unlearn so much and relearn it by new ways, and because they came to their actual job with the conceit of knowledge and skill that made them indocile. The manual training movement has done and will continue to do the country great and good service; but now that its limitations are more and more painfully apparent, there is a great and growing number who believe that its merits will sooner or later be seen to have been very partial and offset by defects, and that it was really useful chiefly as making headway against the invincible prejudice of the pedagogic mind against any training that has direct practical value. Instead of the extreme ideal of the culturist that school is a place where nothing useful is taught, the new slogan is that the school should be a place where nothing is taught that is not useful, and that the very first duty the state owes to its children is to make them self-supporting.

One of the gravest defects of this movement is that many of these schools do not fit for the next stage of education, and do not lead on by direct continuity to the technical schools or colleges, like the Sibley School at Cornell or the Massachusetts Institute of Technology (1865). We have a few rather disquieting figures from some of these schools concerning the destination of their graduates, the large majority in some cases not even entering any industry or anything else for which their course has prepared them. This does

not apply to some of the newer or manual training technical high schools, where the pupils do go on, but most of these schools classify according to, and subordinate the stages of work to, the tool and are oversystematic and rigorous, with pedantic strain upon accuracy and with almost no connection with science on the one hand, nor with the great outlying industries about them, on the other, so that they are too abstract.

A Proposed Substitute for Manual Training.—There is a break of continuity between school and shop work, and there is more or less antagonism and waste. School-teachers can never learn to teach a trade well, and foremen can never teach it in a way to entirely satisfy the pedagogue. Moreover, the contrast in passing from one to the other is extreme and confusing to the pupil, so radically different is the method and spirit. Although the plan of Columbia to train shop foremen to be teachers on the one hand, and while the Labor Unions on the other, might do very much, there will probably always be need for some intermediate institution to link the two. Manual training has sought to supply this bridge from school to shop, and, while many have traversed it, it was badly constructed, its very plan was temporary, and it is now tottering. Its too sudden demolition just now would be disastrous; but in view of this situation, there is one new departure that has often been suggested, many elements of which have been successfully tried, some here, some there, which has always lain very near my heart and which it is now high time to have seriously tested in some experimental way: viz., a curriculum of toy making for lower, and simple scientific apparatus for higher grades. This would be a far better introduction to shop schools, would have the great advantage of beginning during the years when most boys now leave school, and would attract them to stay. It would naturally and easily correlate with the playground movement, for many implements for many games could be made. It would be recapitulatory and humanistic, for most of the best plays and games are dwindled and ancient forms of adult occupations, so that in play the child is, in a till lately undreamed-of sense, repeating the history of the race. The toys which are offered to American children are a disgrace and insult to the true nature of childhood. Instead of being masterpieces of sim-

plification of everything possible that adults care for, they are machine-made, monotonous, cheap, antique, and utterly fail of the true purpose of toys, which is to introduce the child to adult life smalled down to the dimensions of his mind and hand. By the method here proposed, the products would be used by the maker. They could never interfere seriously with markets or prices, and would appeal strongly to the imagination and intellect, which are vastly further developed in children than their power to produce. One of the capital errors of most schemes of industrial education is that the appeal is mainly limited to the hand, and the vastly greater power of the child to appreciate and understand than to do is not recognized. I would lay it down as a law of universal application that in every course of manipulation, no matter how practical and laborious, three quarters of the appeal should be to the interest and intelligence of the child, which is far in advance of, and growing far more rapidly than his manual power during the few years that just precede and follow pubescence. Manual training courses directly tend to divorce mind and hand. The impression of labor it leaves upon the pupil's mind is that it is monotonous, mechanical drudgery with pedantic insistence upon accuracy, and is pretty remote from utility. Over against all this, most of the brain work of most of the best minds of our age and its very heart and zests have been given to agriculture, manufacture, and commerce. Here the struggle for survival has been most intense. Manual training has proven itself notoriously lacking in appeal to head or heart. It is a depressing and woeful introduction to what will be to most the business of life. This is all the sadder because somewhere along the lines here indicated lie the rich mines of native and long ago stored-up, human interests which, if we can only find and work them, will run the whole educational machinery during these most critical years with astounding energy and with incalculable economy.

The primal spur to all industry was and is to own and use the finished product. This was and is the goal and inspiration and the process was only a means to that end. Utensils, shelter, dress, ornament—all were desired, and so man set to work to make them, and he was interested—in his

toil just so far as it gratified his wish. Our educational methods divorce these two and so resemble slavery, because the children have no usufruct of their efforts. Often the things they make are for exhibition purposes only or are owned by the school or for its use, in which their zest is in large degree an artifact. Possibly it is for their parents or the home or, at best, is sold and they may have a share of the price. The utilities to which the products of the school factory are put are rarely what they want so badly that they welcome the effort it takes to make them. The results, to be sure, are more tangible than those of book study; but is it not an obvious commonplace that it makes an immense pedagogic difference what they make, and that the best results are really where the finished handiwork plays a vital rôle in their lives? Play is their strongest passion; hence their first interest is to use, and the next to obtain money to buy, what they wish. It would seem therefore to be a sun-clear principle that their first industrial endeavors should be directed toward making toys, alloyed with only as much educational value as they can take without loss. Play is now happily coming to its own; and the upper grammar grades represent the point of chief bifurcation between play and work, so that the latter develops best where the play impulse can be most directly turned on and this difference obscured as long as possible. To work at a favorite toy is playing at work; and this is needful to bring the best that is in the boy to bear. Even tools and implements of reduced dimensions or simplified are toys. The greater the number and variety of these he has smalled down and elementarized to the dimensions of his hand to make, his mind to comprehend, and his power to use, the more valuable the educational process. Thus in these days of happy renaissance of playgrounds, plays, and games, we find our urban children need to be taught how and what to play, and so industrial education should have, as one of its earliest chief ends, to help in this process. Hence the more and better the children work, the more and better they should play. A rich chapter of psychology might here be written from well-established data, were proof of this principle necessary.

What then is the practical proposition to use this impulse

here? It is nothing less radical than to supplement most of both sloyd and manual training as now current by a *course in toy making in the earlier, and in simple scientific instrument making in the later, stages of preliminary industrial education* before the time has fully come to train in specific industries; and thus to bridge the way from school to shop more effectively than is now done, as well as to help fill up the at present half-wasted years below and even into the teens. This is perfectly feasible and would involve far less loss or even change than might at first seem of material organization, etc., and it would bring immense pedagogic reinforcement, both during this stage and in its later after-effects upon the entire spirit and method of adult labor, so that I cannot see why it should not be begun at once. The first step is to inventory the children's interests, visit toy shops, find out the resources of the various nations most in advance of us in toy making, like Germany, Japan, and France, and, laying other races and ages under tribute, to select with the greatest care each object to make, until we are certain of the pedagogic justification of everything and, when a list is chosen, curriculize it according to age, taste, and difficulty, and proceed to realize the scheme. The extent of the resources in this field is now amazing. As a nation, we are at a very low ebb, or have been till lately, in both the will and the way of adapting things which adults use to childhood or reducing men's work to boy's play. Besides toys now actually in use in various parts of the world, the recent rapid progress of invention and science has opened vast new possibilities here, that are as yet nowhere improved for the young as they would be, were we not so engrossed with mature occupations to the unprecedented neglect of the young. Even the possibilities within our reach are little known and still less utilized. I am, of course, far from being able to lay down here what should be done in detail, for this would require a long, careful, and coöperative survey, although some things in the right direction may be roughly indicated. A properly chosen committee in a year or two of investigation could open up a broad, new way for education. Indeed, toy exhibitions and congresses, as they have been held in Europe, would of course give great stimulus and aid.

It should be premised and never forgotten that from the standpoint of industrial education the recorded history of the race has not yet been utilized aright. Dewey's efforts in Chicago years ago to lead young children over the pathway of the history of labor were exceedingly ingenious and suggestive, even if there was only a limited adaptation of phyletic to ontogenetic. Paleolithic and Troglydite periods hardly correspond to the stone cutting or masonry of to-day. The so-called Bronze Age, so far as we know, is not very much represented in childhood. Possibly clay modeling and the elements of pottery belong rather early. It may be that the molding and hammering of lead and whittling belong here; and significant too are the lessons drawn in Chapter I from the first zests of children in points, edges, strings, clubs, and things to strike with. The Nomad Age is better represented in truancy and runaways, and suggests excursions. The Hunting Age correlates with the sling, crossbow and fishing passion. No boy ever invented a boomerang. Domestication is represented by pets, and perhaps by the horse school of California; it may be by keeping bees, pigeons, dogs, etc. In weaving, skin dressing and cloth making, as well as shelter, we doubtless have atavistic motivations from the tepee up. Play in general is the rehearsal in the midst of our own life of very ancient paleopsychic activities which belong earlier in the race. Thus, on the whole, I believe the very best possible practical field for the recapitulation theory is just at this stage, and that, therefore, we should find powers at our disposal, could we learn how to turn them on, that would enable us to develop before and perhaps a little into the teens the very best liberal and humanistic basis for later special training that industrial education can ever possibly expect to have.

I append a few simple hints whacked together at my writing desk in the most reprehensible way like other abstract study courses with no test of experience, but which may serve to illustrate how use should dominate. I would give to a group of boys in a school a shop, which should be very meagerly furnished at first so that tools be kept in the background instead of pushed to the fore, roughly sawn slats, show them a good pattern and demand that they make a yardstick, a foot-rule, and some of them a 10-foot pole, so that we could measure the yard, room, desk, blackboard, their own height, width,

street, sidewalk, halls, running tracks, etc. Although saw, plane, scratch awl, and square should be at hand, I would allow them to whittle freely with a jackknife if they preferred. They should be told a little, and shown more about laying off feet, inches, and fractions, and to use the metric system on one side. I would lay great stress upon exactness, not at all in finish or angles, but only in lengths. Then each should measure with the standards he had made and make simple computations, always having several individuals on each task for comparison. The measuring instinct is strong in boys and it might be applied to anything else they chose. The results would, of course, bring out many personal differences in the exactness of both the use of standards and the workmanship. Those who thought they could do better might try again if they wished. On this work, considerable mathematics might be based. Then I would have them make a wooden square and a pair of rule compasses, the latter with whittled joints and pegs with the use of a gimlet, with a pin point at the end of one arm and a hole for chalk or pencil at the other. Very clumsy it would be, and each might try again; but if it were a true square and if the compass could be made to draw a true circle of different sizes, it would do, because all is for use and nothing for ornament or exhibition and the contrast with good models, which should always be at hand, would have its own lesson. The compasses made by different boys should have a large range of size. Each boy should show what his instrument can do on paper, the blackboard, the floor, perhaps the yard, and various exercises in construction and grouping could now be done combined with the rule. Other ways of making circles should be demonstrated at "the circle age" now known as the nascent period when it occasionally becomes an obsession. Relations should be pointed out to the ellipse, cylinder, cone, and how to make and draw these and also spheres.

Next perhaps the boys should learn to mortise or otherwise fasten cross sticks together at right angles and support their ends as frames for kites; and this would open another most meaty chapter for the boy, whose very heart follows wherever the work of his hands goes. When they had made kites of different patterns that would go, I would appeal strongly to the intellect. *Every good kite book should be at hand* and each should be given something to read, with an opportunity to pool his knowledge for the benefit of others. The youthful mind is essentially docile. It is far more receptive than it is active—a truth which nowadays our industrial educators are prone to forget because, although all children are more or less motor-minded, the very essence of childhood is its exorbitant capacity for intake of impressions. Depending on a rank crop of interest, I should expect to reap very speedily in this rich soil, if properly sown and cultivated. I would linger here and branch out a good deal to parakites, box-kite patterns, and many details. Something of history would encourage efforts to imitate or even parody as many

things as have been done with kites as is possible.¹ Thus skill with the fingers should be harnessed to the development of the cerebral neurons, as it should always be, for thus only are we working in the depths and not in the shallows of the soul. *The boy's reading should thus be stimulated*, an inner eye back of the retina opened; and that priceless, although semiconscious, education which is by hints and suggestions and is far more rapid and indelible than anything in the examinable memory regions of the soul goes on by leaps and bounds. Here kites often have their season, as in Japan it is March when the sky is filled with many patterns of them, flown with a high degree of skill by clubs and at festivals. There are many devices, methods, colors of covering, modes of controlling dives and swirls, steering, self-registering springs, belaying and friction cleats, speeders, modes of measuring the angle of elevation, signal alphabets and codes, the box kite adapted by Hargrave from the Japanese one-celled prototype, W. A. Eddy's improvement on the Malay kite, Chanute's ladder kite and tandem system, J. B. Millet's observation kite,² Wise's methods for night signaling,³ life-saving kites and their stories, kites carrying telegraph and telephone wires,⁴ modes of recording pull, the results of the study of layers of the air,⁵ e. g., that the Boston east wind rarely has a depth of more than 1,200 feet, and that approaching changes of temperature appear 6 to 12 hours earlier 1,000 feet up than they do on the ground, upward and downward eruptions and thrusts of air strata, the ratio of altitude to the barometer, the attention birds often give to kites, their use in towing boats, modes of guiding them by springs that Baden-Powell used with his kites, the largest of which was 36 feet high, duplex kites or relays to buoy a line, kites as drawers of carts, their use by W. L. Moore, of the Weather Bureau, who, as a result of 3,835 observations at 17 different stations, found the reduction in temperature about 5 degrees for each 1,000 feet of altitude, these gradients being greatest in the afternoon.⁶

One of the most mind quickening of all domains of contemporary interest and activity is the story of the conquest of the air. No one knows the origin of kites. That the wind will lift and sustain a

¹ See G. T. Woglom: *Parakites; a Treatise on the Making and Flying of Tail-less Kites for Scientific Purposes and for Recreation*. New York, Putnam, 1896. 91 p.

² *Scientific Kite Flying*. Century, 1897. Vol. 32, pp. 66-77.

³ H. D. Wise: *Experiments with Kites*. Century, 1897. Vol. 32, pp. 78-86.

⁴ W. A. Eddy: *Photographing from Kites*. Century, 1897. Vol. 32, pp. 86-91.

⁵ A. L. Rotch: *A New Field for Kites in Meteorology*. Science, 1901. N. S. vol. 14, pp. 412-414. Also his *Meteorological Observations with Kites at Sea*. Science, 1901. N. S. vol. 14, pp. 806-807.

⁶ E. Milarch: *Aus dem Reich der Lüfte*. Bonn, Georgi, 1908. 155 p. E. Rumpfle: *Die Flugmaschine*. Berlin, Braunsbeck & Gutenberg, 1909. 327 p.

light and tethered plane must have been discovered again and again. From the kite festivals of China and Japan with their sportive and even religious symbolism to the compound kite systems that lift men hundreds of feet, and photographic and other scientific apparatus miles into the air and bring us knowledge of topography below and aerial conditions above, is a long wonder tale of mingled play and scientific interest combined in unique, if not ideal, pedagogic proportions. Then comes the chapter of balloons, from those of toy dimensions up to the great crafts that compete under the direction of clubs. More recently came the era of dirigibles culminating in the airship of the Zeppelin type, almost as long as a man-of-war and carrying 15 or 20 persons with half a ton or more of machinery and accouterments, sailing in the teeth of a strong wind and already in Munich making regular trips with an established fare for passengers. The *aéroplane* of the Wright-Paulhan fashion has its own chapter. All this has involved many new legal questions, not only as to patents, but as to the rights of property owners to the air above their land, the damage done by dropping ballast and garbage, landing in fields, the danger of collision, rights of way, etc. There are almost unlimited military possibilities involved: by their aid soldiers can attain knowledge of the enemy's forts and positions and may be able to drop bombs on ships and cities from heights beyond rifle range, new vertical guns are invented and serpentine courses laid down most likely to avoid their aim; curiously, too, not a few practical principles entirely unknown before have been accidentally discovered, and there is already a short but pathetic list of martyrs who have lost their lives in experimentation, to say nothing of the saddened, if not shortened, career of Langley, who, despite the newspaper ridicule of his failures, contributed more knowledge and did more to give these problems scientific standing than any other. Several eminent authorities had deliberately declared, too, that various achievements now actually accomplished would be impossible.

Now the point to which I invite the attention of every reader and challenge every critic is this: while we have been quick to discern the commercial possibilities of financial gain and have al-

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- A. Hildebrandt: *Die Luftschiffahrt*. Munich, Oldenbourg, 1907. 426 p. George Wellner: *Die Flugmaschinen*. Vienna, Hartleben, 1910. 152 p. W. deFonvielle: *Histoire de la Navigation Aérienne*. Paris, Hachette, 1907. 270 p. H. Delacombe: *The Boys' Book of Airships*. N. Y., Stokes, 1909. 244 p. R. P. Hearne: *Airships in Peace and War*. N. Y., Lane, 1910. 324 p. A. Lawrence Rotch: *The Conquest of the Air*. N. Y., Moffat, Yard, 1909. 192 p. A. Hildebrandt: *Airships Past and Present*. London, Constable, 1908. 364 p. Alphonse Berget: *The Conquest of the Air*. N. Y., Putnam, 1909. 295 p. Hiram S. Maxim: *Artificial and Natural Flight*. London, Whittaker, 1908. 166 p. Victor Loughheed: *Vehicles of the Air*. London, Unwin, 1910. 479 p. A. Haenig: *Ballon- und Flugmotoren*. Rostock i. M., Volckmann, 1910. 196 p. Neumann: *Die internationalen Luftschiffe*, 1910. Oldenbourg i. Gr., Stalling, 1910. 102 p.

ready several rival stock companies, and while every newspaper in the land has exploited to the uttermost every sensational achievement and possibility in all the stages of this remarkable development, not one of all our pedagogues has made any effort worthy the name to utilize the great, new, manifold, educational resource here opened. The appeal to youthful interest is intense, and the latter could absorb a whole sheaf of principles of physics in the easiest, simplest, and most effective way. From the mechanics of the air to the gasoline engine which made dirigibles possible, there is a culture-history value for developing intellect and also for creating industrial zests and even activities. Magazine writers have exploited phases of the topics here involved of which a few libraries have made convenient lists, and a few alert pedagogues here and there have tried to turn on the high-pressure power of interest to enrich the programme. Very few English writers have deemed it worth while, and no teacher has been possessed by the idea that boys have a right to have this matter sifted, adapted, and illustrated. In Germany this need has been recognized and there are a number of interesting handbooks written by those who have realized that this new development involves new duties to the young; but none of these have yet been translated. If they only had a little more consciousness of their own real needs in this respect, boys would organize a strike or formulate and present to the teaching body a bill of rights demanding that they no longer be kept in ignorance or left to snap up only the scattered crumbs of information on a subject in which is focused now so much interest on the part of business men, capitalists, lawyers, physicists, meteorologists, and mechanics. As it is, most of the wealth of boy interest in this contemporary field is allowed to go to waste for pedagogy, and the psychological opportunity for mental stimulus and fertilization is lost. Boys might not unjustly almost imitate the spirit of the barons of Runnymede and demand knowledge, as they did rights, withheld from them. That no one has it in his heart to tell the boys, to proclaim the glad tidings from the frontier, to animate them and to find his reward in the eager attention and intellectual uplift of it all to them, that no teacher burns to impart it or sees its culture value, is only another expression of the sad fact that we have lost contact with the nature and do not serve, or even see, the needs of the young.

Another excellent object, that the experimentalists in industrial education try out, is the making of *puppet theaters*. Teachers have lost sight of the possibilities here which a century ago loomed so big in Continental Europe, especially in Germany. The wood, paste-board, cloth, thread work, and perhaps some of the figurines could be made; and this prelude would involve literary knowledge while the manual skill needful to operate these shows would have a place. The revival of this lost art would need a little fostering care at first, but would be well worth trying, here and there at least, as an annex to supplement industrial training. If a suitable interest could

be aroused, it would be a rare and precious combination of hand work and literary, historical, and art interest in excellent pedagogic proportions. The life of Goethe shows its influence on certain superior types of juvenile mind, while the famous Munich puppet show, which still survives, shows the charm of simplified drama for children, who might participate in as well as see productions.

Another strong boy interest is that in *firearms*. This is intense and often leads lads to obtain pistols surreptitiously, to use them both as toys and in earnest. The owning and perhaps use of a "gun" at the age when this interest culminates, the thrilling moment in melodrama when, perhaps at the hands of a feeble girl or an avenger, the villain is foiled, makes a dramatic situation that was impossible before. It gives the weakest, smallest, and fewest power against the strong and the many, and makes virtue and vice, as the case may be, triumphant. We need, too, gun books on pedagogic principles to intellectualize and sublimate this now wasted and degraded instinct. It should tell in clear and simple language and with copious illustrations the story from the invention of gunpowder to Krupp, describe all the stages, the manifold tests, the experiments, the manufacture, the improvements in rifles, the methods of studying the force and range of projectiles, their use and abuse in war and peace, with subtle moral suggestions about personal combat, honor, the slaughter of game, etc., interest in target shooting, records, modes of warfare, great battles, innumerable hints as to processes, and the business methods involved—all this might be set forth in a way to give contact at every point with the natural fascination boys have in man's recently acquired power of hurling missiles of death with accuracy at great distances. This should be perhaps introduced by an anthropological chapter on bows and arrows, and even spears and javelins hurled by arm power, modern bow-shooting clubs, etc. Such a book could be constructed that would do very much to lay betimes in the youthful soul the foundations on which the aims of all peace and arbitration movements might be advanced. If pedagogy were a real muse to-day this would be a most acceptable offering to lay upon her shrine. It is easy to imagine how, rightly presented, this might make even a gang leader sit up and take notice, and become almost a veritable Bible among the hunkies. Instead of this, we have here again a great and natural pedagogic power going to waste or worse, because we are not in earnest in the matter of doing our best with and for the young. Our educational instincts are suffering atrophy, our sense of responsibility is conventionalized and rutty, and what might be an intellectual spur is ignored and the motivation may in extreme cases even take a criminaloid form.

What has been said above, e. g., about aerial navigation for boys might be said of many other things. In many cases only part of the toy or apparatus could be, or would need to be, made in order to get its educational value. *Tops* open the secret to some of the

profoundest problems of nature, and an eminent physicist friend insists that boys could easily make a Maxwell top and could record some of its wonderful gyrations, and that nothing would lead so strongly and directly from sense to reason. A graded course in tops alone would incite curiosity in everything that spins or rotates and would contribute to build apperception organs for vortexes, atoms, and stellar systems, later. The stimulus here would be very great. Among German toys are steam engines that both go and reverse; and all this leads over by insensible gradations to illustrative apparatus; for natural history, bugs that creep, birds that fly, monkeys that climb, soldiers that march, thrust, shoot; boats with wheels and rudders, flowers opening to the bee and springing like a Venus's fly trap. On processes like these, too, the basal principles of mechanics, acoustics, optics, magnetism, and all the rest, of which algebraic formulæ are the scientific language, could be illustrated. The following apparatus in physics has been made in schools as a propædæutic to industrial training: color discs, vibratory rods and plates, siphon, sucker, spyglass, Magdeburg hemispheres, vernier, hour glass, balance, pendulum, thermometer, barometer, monochord, apparatus to show expansion, evaporation and certain hydraulic laws, chark or fire drill, the pith-ball apparatus, magnets, electric keys, telegraphs, various optical illusions. R. S. Baker¹ has a very pedagogic introduction to popular science. First there is a voyage on the sea bottom in a submarine boat, the *Argonaut*, which can rise or sink, run on the bottom on wheels, has openings for divers, etc. The second chapter describes liquid air, with all the steps from Pictet in 1879 on to liquid nitrogen by Dewar, and just how Tripler does it, and how it behaves. Then comes the story of Marconi, his successes and difficulties to date. Motor vehicles, X-ray photography, and the phonograph, with plenty of personal storiology, complete the volume. D. C. Beard² follows the seasons for his amusements; spring is for kites, fishing, aquaria, flower and house gardens; summer, for knots, hitches, loops, water telescopes, tangles, trawls, boats and rigging, soap bubbles, camping, bird keeping; autumn, for traps, dogs, taxidermy, camera, drawing, photography; winter, for snowballs, houses, sleds, sleighs, ice boats, snowshoes, skates, phonographs, puppets, kaleidoscopes, fantastiscopes, costumes, etc., all with plenty of parts and things to do and make to train the hand. Cassell's book³ is copiously illustrated with diagrams for cricket, football, polo, tennis, golf, baseball, aid to the injured, swimming, boxing, fencing, hoop, marbles, archery, wrestling, rowing, bowling, croquet, quoits, billiards, chess, backgammon, checkers, experiments with heat, light, sound, in chemistry, mechanics, geological recrea-

¹ The Boys' Book of Inventions. New York, Doubleday, 1899. 354 p. See also his Boys' Second Book of Inventions. N. Y., McClure, 1903.

² What to do and How to do it. N. Y., Scribner, 1882. 391 p.

³ Book of Sports and Pastimes. N. Y., Cassell, 1904. 973 p.

tions, wood and metal work, shipbuilding, pigeons, rabbits, squirrels, silkworms, parlor games, puzzles, tricks, conjuring, charades, acrostics, with plenty of things to do and make, but with this element subordinated to use. R. B. Routledge¹ has compiled two volumes of great pedagogic interest, the first dealing with the steam engine and its use, iron tools, railways, workshops, firearms, Suez Canal, sand, iron bridges, printing press, pneumatic dispatch, hydraulic power, spectroscope, the eye, lighthouses, new metals, anæsthetics, explosive gas, and finally the greatest discovery of the age, "Joules's foot-pound," with occasional portraits and biographies interspersed. His later book² describes the grounds and environments of an ideal school at Overton Lodge, where the principal develops a scheme of teaching science by pastimes, discussing the steps of his plan with the vicar. The third chapter is more serious, on magnetics, simplified theories of magnetism; then come pastimes about magic mirrors, fairy fountains, the camera obscura, the magic lantern, etc. Then come the thaumotrope, zoetrope, spectrum, color tops, and color blindness and the blind, signboards, symbols, riddles, hearing through the teeth, whispering galleries, sea shells, speaking tubes, music boxes, complex vibrations, ancient music, combs, oscillations, force, inertia, and matter, first law of motion, impact, billiard playing, stable and unstable equilibrium, balancing, stilts, the ball running up an incline, waterfalls and wheels, trip hammers, kinetic energy, the swing, Galileo at Pisa, absolute time, standard time, centrifugal force, tension, capillarity, vacuum, compressed air, popguns, bellows, pump, valve, barometer, battledore and shuttlecock, rockets, and tumbling puppets. T. A. L. Du Moncel³ describes various forms of musical and speaking telephones, explains the fundamental principles and arrangements of the Bell type of eight- or ten-battery telephones, the Bell patents, with experiments, the microphone with its attachments, uses, stations, call bells, alarms, etc. The book is a model of clear and concise statement, although not up to date. J. H. Pepper⁴ explains the use of much chemical and physical apparatus required for simple experiments concerning impenetrability, centrifugal force, gravity, cohesion, crystallization, optics, heat, etc. The illustrations are particularly well chosen, although the occasional appeals to humor are less successful. A very interesting relay to all this is found in the literature of magic,

¹ Discoveries and Inventions of the Nineteenth Century. N. Y., Routledge, 1898. 767 p. See also G. B. Smith: How to Succeed as an Inventor. Phila., Inventors and Investors Corporation, 1114 Chestnut St., 1909. 76 p. G. C. Marks: Inventions, Patents, and Designs. N. Y., Van Nostrand, 1909. 116 p. George Iles: Inventors at Work. N. Y., Doubleday, 1906. 503 p.

² Science in Sport made Philosophy in Earnest. London, 1877.

³ The Telephone, the Microphone, and the Phonograph. London, 1879. 272 p. 70 illustrations.

⁴ The Boys' Play Book of Science. Lond., Routledge, 1881. 506 p.

now quite voluminous. The best of these books, like those of Albert A. Hopkins¹ and Professor Hoffmann,² abound, like the toy books, in scores and hundreds of illustrations of things that easily could be made into a manual training department at every grade, from lowest to highest, and which from the beginning would illustrate scientific principles and give all the zest that the natural boy feels in the manipulations of the superior knowledge that thaumaturgy supplies. Oliver Lodge³ gives a brief story of the lives and achievements of Copernicus, Tycho-Brahe, Kepler, Galileo, Descartes, Newton, Brochme, and Bradley, Lagrange, Laplace, Herschel, Bessel, with additional talks on the discovery of Neptune, comets and meteors, and tides and planetary evolution. The biographical portion of each section treating of different writers is brief but serves as a stimulating introduction to the processes and accounts of their scientific achievements which follow. Photography has pedagogic features, and among the most interesting institutions I have ever seen is that of the Imperial School of Photography with its magnificent building in Vienna, where all the processes of reproduction, lithography, lantern slides, and scientific demonstrations are laid own. Here we have popular books by D. L. Elmendorf,⁴ A. E. Dolbear,⁵ Lewis

¹ Magic Stage Illusions and Scientific Diversions, including Trick Photography. N. Y., Munn, 1897. 556 p.

² Modern Magic. Lond., Routledge, 1886. 511 p.

³ Pioneers of Science. N. Y., Macmillan, 1904. 404 p. See also G. E. Johnson: Education by Plays and Games. Boston, Ginn, 1907. 234 p. M. R. Hofer: Popular Folk Games and Dances for Playground, Vacation School and Schoolroom Use. Chic., Flanagan, 1907. 56 p. D. C. Beard, Boy Pioneers, N. Y., Scribner, 1909. 329 p. Mrs. F. H. Kirk: Old English Games and Physical Exercises. N. Y., Longmans, 1906. 51 p. F. Wehman: Wehman Brothers' New Books of 150 Parlor Tricks and Games; homemade apparatus. N. Y., Wehman, 1905. 106 p. J. D. Champlin: Young Folks' Cyclopædia of Games and Sports. N. Y., Holt, 1899. 784 p. J. H. Bancroft: Games for the Playground, Home, School, and Gymnasium. N. Y., Macmillan, 1909. 456 p. W. Kirsch: Scientific Magical Experiments. Newark, N. J. W. Krisch, 1910. 8 p. H. J. Burlingame: Hermann the Great; the famous magician's wonderful tricks. Chic., Laird, 1905. 298 p. B. R. Parsons: Plays and Games for Indoors and Out. N. Y., Barnes, 1909. 215 p. Games Book for Boys and Girls. N. Y., Dutton, 1906. 415 p. D. F. Canfield (and others): What Shall We Do Now? 500 Games and Pastimes. N. Y., Stokes, 1907. 419 p. M. E. Barse: Games for all Occasions. Brewer, Barse & Co., 1909. 208 p. C. Wells: Pleasant Day Diversions. N. Y., Moffat, 1909. 282 p. W. H. J. Shaw: New Ideas in Magic Illusions, Spiritualistic Effects, etc. St. Louis, W. H. J. Shaw, 1902. 93 p. H. R. Evans: Old and New Magic. Chic., Open Court, 1909. 450 p. W. Goldston: Tricks and Illusions for Amateur and Professional Conjurers. N. Y., Dutton, 1909. 250 p.

⁴ Lantern Slides; How to Make and Color Them. A Practical Pocket Book of Photography. 1900.

⁵ The Art of Projecting. Boston, Lee, 1892. 178 p.

Wright,¹ Ernst Vogel,² and others. There are very many manuals here treating of various types of apparatus, the dark room, negatives, gelatin and dry plates and wet, collodion, emulsions, enlarged and reduced negatives, recovery of the silver residues, various processes of printing, toning, copying, and directions how to make a very simple practical laboratory. The point is that the mind of active boys ought to be exposed to books of this kind, among which each would be sure to find something ravishing and mind kindling. Manual construction of the whole or of parts, now large, now small, could readily be so arranged as to give intellectual interest its due prominence, and to make it the mainspring for inciting to manipulation. If the books which now exist were used as they should be, this would incite to the writing of the many more and better than now exist that ought to be and would be composed. And all this may serve to illustrate the new type of curriculum which I urge ought to be constructed as a link that is missing between the school and shop which the present mechanical manual training courses, wooden in their intelligence and iron in their inflexibility, do not bridge.

All this would show natural aptitudes and help *vocational bureaus* like that established in 1908 in Boston, or other agencies to test and advise youth, which should exist in every city. Some schools have assistants to help their graduates in this way. O. H. Woolley, Passaic, N. J., has representatives of the professions and industries of the city give talks before the high school as to their business and the opportunities—one on its dark and one on its bright side—laying stress on the peculiar natural and educational qualifications necessary for success in each. Connected with some trade schools for girls are assistants to recommend graduates for positions they can fill or to investigate factories and shops to see if they are fit. The late Dr. Frank Parsons³ developed *questionnaires* that became for older youth rather highly elaborated, which each applicant had to fill out as a basis for the personal advice of an expert. The idea was to size up each lad with regard to his physical, mental, and moral qualities needful for success. The Y. M. C. A. in various places has at-

¹ *Optical Projection; A Treatise on the Use of the Lantern.* London, Longmans, 1901. 438 p.

² *Practical Pocket Book of Photography.* Tr. and ed. by E. C. Conrad. Macmillan, 1902. 223 p.

³ *Choosing a Vocation.* Boston, Houghton, Mifflin Co., 1909. 165 p.

tempted some of this work, which is now being begun in Germany.¹ That vastly more could, should, and will be done along these lines now seems certain. Courses for such counselors have already been proposed, and in a few instances given in outline. Such an adviser needs to have two very diverse kinds of knowledge: first, a large endowment of native tact and knowledge of human nature, and the special psychology of which this is the best foundation, along with certain apparatus for making tests scientific; and, second, he needs a wide practical knowledge of the leading branches of industry. No one can doubt that misfits now cause great waste and many pathetic failures on the part of men who, if in the industries they were best fitted for, would achieve success. Inherited tendencies toward diseases should bar those who have them from certain industries. Every quality is a factor in the inventories needed, such as size, good looks, manner, dress, habits, tastes, reading, experience, disposition, resources, residential and family ties, voice, accuracy of senses, memory, sympathy, association, ambition, readiness to adapt, rapidity of thought and action, power to work with others, regularity, cordiality, self-reliance, tolerance, foresight, temper, poise, democratic disposition, ability to persuade, trustfulness—all these and many more are assets, and upon self-analysis, aided by the investigations of the adviser, wastage may often be avoided and occasionally great success insured. No college elective system has presented so many options as do vocations now for people far younger than college students. We now treat subnormal children far better when we subject them to scores and sometimes hundreds of tests as a basis for prescribing their hygiene, pedagogics, regimen, instruction or calling. Here is where accumulated data from the study of children and adolescents might be made of the greatest practical service. Vast numbers of young men and women have consulted phrenologists and perhaps palmists, astrologers, spiritual mediums, etc., to get tips on how they should invest the most precious capital of their lives; although for most of them chance, accident, local environment, and the example of cronies determine. An office where crude human

¹ L. Mittenzwey: *Der Berufswahl*. Leipzig, Dör, 1910. 217 p.

material could be assayed is surely now a desideratum. The demands of many business concerns are of late more and more frequently scheduled with great detail, and examinations for fitness are often elaborate and extend far outside those qualities that education can cultivate. Sometimes ambitions and inclinations are developed in directions in which other traits would make great success impossible; while often the realization of this fact, if it comes betimes, will supply the most potent of all incentives for overcoming the handicap. The field for this applied psycho-physiology is wide, and, when the supreme value of the human factor is fully realized, there can be no shadow of doubt that every boy and girl will be provided with access to such an expert, a single session with whom has already in many instances changed the entire current of lives from failure to success. Vocational proclivities and abilities are often apparent some years before puberty, although at the dawn of adolescence they become very manifest. The advantages of such psycho-industrial experts would be great not only to the young but to those who employ them; and a certificate of aptness with more or less detail will no doubt ere long supplement the ordinary testimonials of general character. The demands of employers, if collected and systematized here, would be a great spur to boys ambitious of entering specific vocations; and these, concisely and authoritatively put together, would be a boon to our entire educational system.

History shows an almost invincible tendency of pedagogues to reduce everything introduced into the school to scholastic hypermethodic form, and to *disinfect it of every taint of utilitarianism for the sake of culture values*. The story of the kindergarten, drawing, physical culture, nature study, and even science, shows this. Indeed, stenography, dressmaking, embroidery, bookkeeping, and all the rest have been challenged on the one hand for lacking, and advocated on the other for having culture value, just as sloyd and manual training have been purged of utility to become liberal and been made a drill in mere manual dexterity. This horror of remunerativeness leads M. B. Higgins to say, "Our trade school is generally a school attachment while it should be a shop with a school attachment." Many recent psychological

studies throw grave doubt upon the whole gymnastic theory of education, so that it is at any rate now an open question whether the training of one activity strengthens another, or whether any study can give general power, ability, or formal discipline that helps others. Once it was thought that the study of logic and the categories, then classics and mathematics, gave unique power that, once acquired, could be turned into almost any field. This was aided by the view that the mind was not divided into faculties but was unitary. It is demonstrated that even memory training in one field gives little mnemonic power in others, although Angel, Pillsbury, and Judd¹ think the practice of one function influences another, and that activities are so interrelated that we must assume some identity of common elements. In point of fact, we psychologists must make the mortifying confession that we know almost nothing of pure culture values, either what they are or how to acquire them. But we do know that to succeed an individual must put his whole soul into his work, and that the study of even Greek, Latin, and logic in a half-hearted way is demoralizing and soporific. We know, too, that if most men do not find culture value in their own vocation they will never find it. Anything is cultural that arouses the ambition of young people to do their best; hence, whether a topic is cultural or practical depends wholly upon the point of view and the spirit. Education is always only a means to an end; and to teach, to heal, to preach, to plead, to prescribe, to investigate, is industrial training. To put thought into work is to idealize existence. Brereton defines culture as "the sum total of the sociological results of human endeavor in mechanical, mental, and moral fields." C. B. Gibson shows how shop work intensifies interest in what have been thought to be the purely cultural fields, and Carroll D. Wright insisted that industrial training was the best means of cultivating truthfulness, integrity, and social solidarity, for a man without a vocation is not a real member of the community. We know that industry is an immense stimulus to the feeble-minded, and there is a great convergence of testimony

¹ A. Meiklejohn: *Is Mental Training a Myth?* Educational Review, 1909. Vol. 37, pp. 126-141. See especially p. 130.

that industrial schools show a high grade of intellectual work and stimulate it. Professor P. H. Hanus deplors the timidity and often disparagement of vocational things by educators, who, he says, have sometimes "even measured their own usefulness by the extent to which they keep the distinctly useful out of their work," and where they have undertaken to defend even sewing and cooking have done so because of their psychological worth instead of for their great practicality. Thus, he adds in substance, the school fails to reach most of our youth during the most critical period of adolescence, so that they do not have "all the conveniences for thinking." Where the vocational ideal has become effective, teachers seek to make practical topics into "a moral setting-up drill for the intellect." Briggs shows that pupils are prone to regard the school as a place of "delightful irresponsibility where a youth may disport himself before he is condemned to hard labor." Thus if the school can in any sense be called a miniature world, which it cannot, it is an unreal one. A New York teacher writes that she really ceased teaching years ago, and has since been running a machine, and since she has sometimes felt "that school-teaching may be characterized as General Sherman described war." It, too, is paved with good intentions, as well as with fair syllabi. Another says that teachers know the wheel of Ixion, the banquet of Tantalus, Sisyphus's stone, and how Cataline abuses our patience, that they feel the vanity and limbo nature of what they teach. Flexner finds that college students lack "spontaneity and disinterested intellectual activity," and says they emerge "flighty, superficial, and immature," and that "the very qualities that seem to secure the degree B.A. would secure a man's dismissal from any other business whatever." Woodrow Wilson declares that he has come to feel that he was bending all his energies to do a thing that could not be done, as if he were working in a vacuum with no transmitting medium. And Barrett Wendell (*The Privileged Classes of America*) says: "Many bachelors of arts . . . are virtually undereducated." "The younger generation seem hardly educated at all." "Traditional methods of education have been tried and found wanting." For most men work is a struggle for the market, and pupils need to be kept in vital touch with some kind of a mar-

ket idea in order to feel that they are doing something worth while. To be cultivated we must be industrious. No one can work well for culture alone, but for some end or product. It was only when Latin ceased to have any value in the market that it set up as cultural, and here began its decadence. Our present system was meant for an earlier, simpler stage of progress. Its remoteness from practicality is vitally connected with such criticisms as those of Edward Everett Hale, who says: "Our school system fails in instilling morality"; of President C. W. Eliot, who thinks the intelligence it generates is not effective and is hardly worth its cost; of Admiral Evans, who pronounced its product contemptible; of Edison, who complained that it utterly ignored applied science; of Rabbi Hirsch, that it is an almost bankrupt institution; of Frederick Harrison, that it is very successful in turning out uniform stupid types devoid of originality. C. H. Johnston¹ thinks that perhaps we should compel all employers of boys up to seventeen to allow them to continue their education at some favorable art of the day, and that we must radically reconstruct our educational machinery and curriculum. At present there are scores of supplementary institutions to do what the school fails to do. It has to be amplified here, mended there, patched in one place, pinched in another. Type after type of child is more or less segregated as needing special attention. To a recent writer who declared that culture and hard work were incompatible and that the gentleman's graduating mark is *C*, this being the lowest passing mark, we would insist that good laundry work is better than bad Latin.²

Our system is *undemocratic*. It is absurd to speak of the dignity of labor and yet not consider its elements worthy the dignity of being taught in our schools. "It is a fair question," says one writer, "to ask now what good it does the average boy to go to school after the fifth or sixth grade." Those who do so are at best only being trained for positions of a clerical nature, while constructive interests are suppressed.

¹ The Social Significance of Various Movements for Industrial Education. Educational Review, 1909. Vol. 37, pp. 160-180.

² See J. G. Crowell: The One Thing Needful. Educational Review, 1909. Vol. 37, pp. 142-159.

We train all alike, and take small account of individual differences, although it is on these that success largely depends. Each should become conscious of personal powers, but we develop ignorance of these and allow them to slumber, as contrasted with Huxley's idea of a school as a capacity-catching and -developing machine. While the higher technical schools here compare not unfavorably with those in Europe, we focus on the top rungs of the ladder and let those on the bottom take care of themselves. Hence, as Commissioner Draper, of New York, says, "Germany is educationally more democratic than the United States." We take no cognizance of the pupil's destiny, make no distinction between capacities and proclivities. Those who leave are usually those not equipped for the unique work of the higher grades, which will always appeal to but a few, or else they are those with vocational proclivities who become dissatisfied with the school. The boy who goes on till fourteen or after has learned much which he cannot apply, and which is, therefore, forgotten as soon as he leaves, so that by eighteen or nineteen he is more ignorant than when he left school; thus the investment which the state made in his education is wasted. At this latter age the boy should feel tolerably sure not only of a livelihood, but of advancement. Our high school to-day is chiefly for those who have no idea what is ahead of them or else for a very few who are fitting for some higher institution. They are taught a few general principles of drawing, mathematics, physics, chemistry, etc.; but the physics and chemistry of nothing in particular, oblivious of the fact that each of these studies is vaster than a lifetime can master, and that to apply a portion of it or to use it in some field is the only goal that will ever make a knowledge of them more than useless lumber in their minds. In the simpler, earlier, rural conditions, the school touched life; but under the present complex, urban, industrial status, the school has grown more and more isolated. Perhaps our schools are gaining efficiency along their own peculiar lines, as the late Springfield tests on old examination papers of a hundred years ago in geography, arithmetic, and spelling—a test repeated at Boston and elsewhere with the same result—seem to show. But an inactive life can never appeal to the active boy in the early teens, but may develop

habits of idleness, lack of definite purpose and disposition to look forward; and so the harvest at eighteen is unsatisfactory. The book-world pupils learn in school is remote, far more so than it need be, from that which they find themselves in. Had they even studied the political, industrial, and social problems of ancient Greece and Rome and modern Europe, instead of the grammar and languages of these countries, they would have been better able to interpret present history and grasp our and their own problems. Again, teachers usually immediately *lose sight of all their pupils who drop out from twelve to sixteen*, when it is those children who especially need guidance as they near the end of their schooling and especially just as they leave it. Hence, more attention should be given to all as the age of compulsory attendance draws toward a close. Even the learned professions are only trades that split off earlier in history; and we must now carry the idea of professional training down into the public schools, so that here belongs the vocational bureau. Great teachers have often kept hold of and guided their pupils after they left, especially those who dropped out prematurely. No boy should leave without some idea of the industrial conditions of his own environment and some conception of what he is, and perhaps, still more important, what he is not fitted for. Hence, as E. C. Morse well says, geography, English, history should so far as possible have a local focus and be connected with raw material, markets, etc., of local industries. Boys of twelve should know something of the establishments, history, and processes of the larger concerns of their own environment. In every textile center, e. g., there should be a textile museum in the school, stories written on subjects connected with it, and Morse suggests that such written material might in time accumulate so that it could be developed into a *book* to be used in the public schools of the town, such as I shall elsewhere indicate for each trade. Manufacturers should co-operate by a loan of files of their journals; the public library should fall into line; teachers should be given leave of absence from their duties occasionally to prepare pamphlets on the industries of the town. In a school in Cork, each room was surrounded by cases containing every stage of manufacture from the raw material to the finished product; and yet

this was not a trade school. Why should we educate away from trades, farms, etc.? Were our grandmothers the worse for weaving, spinning, making candles, soap, etc.? We might make it a rule that every industrial course should fit for something higher as well as for life; but if we did so, this should be only incidental. At present employers, says J. P. Haney, have no suggestion as to the vocational training of boys before sixteen; while teachers are often thinking of an earlier age. Boys are rarely wanted in shops before sixteen. He, too, insists that by the sixth school year the elementary capacities of pupils may be pretty well detected. Those with proclivities should have their needs met; and this should be made the core of their teaching and not incidental. This kind of training should begin near the sixth grade, where the defection is most marked. Various schools might be so organized as to lead to a particular group of industries; but we must always, where possible, secure the advantage of shop discipline; and thus with short, long, evening, partial, continuation, apprentice, technical, and every other kind of school, we may at last hope to do our duty to the rising generation and to the prosperity of the nation.

Mr. A. D. Dean, of New York, is averse to any scheme that does not *stress the local industrial environment*. His plan is that, if there are 25 boys who wish to learn the plumber's trade at the age of 14, or 25 girls who wish to learn dress-making, instruction must be provided; and the same for any other group. This would give our educational system flexibility. Schools should certainly be open day and evening. Mary A. Van Kleek insists that every single trade must be long and carefully investigated by commissioners or paid experts before conclusions regarding industrial education in that trade can be reached. She reports that 3 investigators have studied 2 trades on Manhattan Island for more than a year, but that their practical results are not yet ready for publication. It cannot be planned apart from constantly changing conditions in each locality. Information usually gathered is far too general to be of use. We must not confuse industrial and vocational education.* The only really valuable material is information concerning conditions in each trade in the community where the trade training is to be introduced.

The visits by pupils to shops and factories should be habitual; the practical should always, as it naturally does, precede the theoretical. The industrial schools ought to exist at least 11 months in the year, and the shop equipment should be the latest and best under a skilled mechanic. Public money must not be focused upon one, to the neglect of other, local industries. Here we have quite a history of failures. Public sentiment is too shifting to maintain a higher standard. In one American city, the entire prosperity of which depends upon the skill and intelligence of workmen, a fine school was slowly built up that was of great aid to the chief industry of the town; but finally rival industries combined and a reactionary board came in, so that all the progress of years was lost.

Now although most of these censures are directed against the school system generally and show the now rapidly rising tide of public discontent with former and present matter and methods, many of them apply to manual training with almost unabated force. The stock manual training courses we not infrequently find *taught* to pubescent boys by *women*—a more absurd pedagogic monstrosity can hardly be conceived. If even the upper grammar grades are becoming more and more girls' classes in general, the effeminate type of manual training takes away the virile element just at that critical age when boys desert school most rapidly, should be turned over to their fathers at home, and need male teachers most. Now the courses that I have plead for above are preëminently boys' courses and need men to teach them, and would tend to bring the lost male factor back into the school. They would allow some of the natural sex bifurcation so imperatively needed when the dawn of the teens comes. The boast often made that girls do as well as boys in manual courses is sufficient to condemn these courses, as all the many studies of comparative hand power of the sexes, that is so rapidly diminishing at this age, conclusively show. Industrial training for boys at this stage of life can thus never be well taught by women; nor can girls ever equal boys in it. All sensible women, unscarred by the war of sex against sex, admit this. Hence, even if it costs more, we must have men. To those nations with the true instinct of parenthood nothing is too good or too costly for the real needs of children. In view of all the

above facts, must we not admit, if we are candid, that we have blindly and shamefully neglected the needs of our boys, that, so far as they are concerned, our school system almost ought to be declared bankrupt and start afresh. If the remedies here suggested are not the true and best cure for this grave disease, it behooves us to give ourselves no rest till we have found a better one.

The *combination of fit reading with hand work*, advocated above for toys and elementary scientific apparatus, might also be applied in modulating over to more vocational training, although the book side, whence should come the intellectual appeal, is as yet slightly developed. *Glasswork*, e. g., dates from ancient Egypt, and its history is fascinating. Till about a century ago glass blowing was often a profession for gentlemen. Its educational value for the hand, in training it to work under the guidance of the eye and brain, has always been rated high. Thomas Bolas¹ brings out much of its charm. His work implies a little knowledge of physics and chemistry. The apparatus needful would take little more room than a sewing machine, and he thinks should be not only in every school but in every house where there are young people. He compares its training value to piano playing. The story of the origin of the different kinds of glass and their manipulation from antiquity down is of the greatest interest and culture value. He combines the story and use of blowpipes, bellows, methods of effecting rapid change from large to small jets, lamps, stopcocks, glass knives, files, how to lead a crack, calipers, grinders, cleaners, rods and tubes, gauging, cleaning, rifting, abrasion, sealing bulbs, perforating, bending, joining and branching, gradations, etching, annealing, connecting tubes with metal fittings, how to make thermometers, vacuum pipes, barometers, phosphorescent tubes, glass pens, lenses, and even how to color and stain. His work is admirably illustrated, and there is an interesting color plate of articles made with a simple blowpipe, with a bibliography on glass work. W. A. Shenstone's book² is briefer and in a

¹ *Glass Blowing and Working for Amateurs, Experimentalists, and Technicians*. N. Y., Truslove, 1898. 212 p.

² *Methods of Glass Blowing for the Use of Physical and Chemical Students*. Lond., Rivington, 1889. 86 p. See also W. Rosenhain: *Glass Manufacture*.

sense more advanced, describing how to cut, bend, make funnels, graduate and calibrate. A bright boy, he says, can be taught on the first day how to make a thermometer, and it would not take long to show him a little of the methods of lens grinding, annealing, working in fluoric colors, making stoppers, choking in and contracting bores, making U and spiral tubes and very simple chemical apparatus. This work has been successfully taught to boys at South Kensington. These books show at least what could be done in the way of further adaptation and adjustment to every grade and even to very young boys.

Again, *plumbing* gives us another combination of brain and hand work which F. W. Tower¹ has described in an interesting and suggestive way. Water next to air is the prime support of life. By its power to transmit pressure it becomes in a sense a machine, natural supply being dependent upon gravity. A treatment of wells opens an interesting chapter in biology. Pumps, hydraulic rams and water meters do the same in physics, filters for chemistry, boilers for hydrodynamics and to introduce steam power generally; while tanks, metals, solder, joining, waste, drainage, subsoil, ventilation, traps, siphonage friction, air locks, water hammers, electrolysis, sinks, baths, lavatories, sewage—are all treated in a way that links science and health and hand power, and shows the real dignity of this profession. This work is a text with question and answer covering interesting points. H. Rowell² treats in a condensed way of the utilization of chemicals, including blowpipe, lamp, alloys, spelters, oxidization, fluxes, structure of flame, heat transmission, radiation, forge, hearth, tongs, property of metals and their fusibility with alloys, various polishes, colors, hardening, sweating, etc.

N. Y., Van Nostrand, 1908. 264 p. A. L. Duthrie: *Decorative Glass Processes*. N. Y., Van Nostrand, 1909. 278 p. P. N. Hasluck: *Glass Writing, Embossing and Fascia Work*. Phila., McKay, 1906. 160 p.

¹ *Plumbers' Manual and Text-book; Dictionary of Plumbing Terms*. Springfield, Lyman, 1901. 242 p.

² *Manual of Instruction in Hard Soldering*. N. Y., Baird, 1901. 56 p. See also J. J. Cosgrove: *Principles and Practice of Plumbing*. Standard Sanitary Mfg., 1907. 278 p. P. J. Davies: *Standard Practical Plumbing*. N. Y., Spon, 1907. 3 v. F. W. Raynes: *Domestic Sanitary Engineering and Plumbing*. N. Y., Longmans, 1909. 474 p. C. B. Ball and H. T. Sherriff: *Plumbing Catechism*. Chic., Domestic Engineering, 1908. 123 p.

In a still different way we might and should combine intellectual interests with the mere deftness now cultivated in raffia work and splint interlacing. Every teacher in this department should saturate his mind with such literature as that which has one of its most exquisite illustrations in the privately printed volume of G. W. James,¹ who considers *basketry* the mother of poetry, and shows its relations to Indian legends and ceremonials, describes the tribes, colors, materials, weaves, stitches, designs, uses, conventionalization, and the marvelous way in which the symbolism of animals, plants, the sky, sea, which is often sacredly secret, is wrought out.

This art is now in a state of decay owing to "the iconoclastic effects of our civilization upon a simple-hearted people." "In the noonday of this art the basket was the woman's battlefield. In it she won her triumphs and suffered her defeats." To be the best weaver was the height of her ambition and to succeed gave great influence. It was an accomplishment like piano playing and brought suitors. There were a few true artists. "It would be a calamity to Indians and Whites alike were this art allowed to die." "In its salvation a greater good can be done the Indian than by a century's distribution of supplies." Those who educate the Indians should have mothers teach their daughters and teach them in every Reservation school. These weavers should be well paid for teaching all that is in them. Whites should sit at their feet and a renaissance here would bring increased respect for the Indian as well as financial return. Symbolism plays an immense rôle here. Some makers have their own designs and conventionalities, the meaning of which it is often hard to learn because of reserve, fear of ridicule, etc. Many designs are still as unread as was the Rosetta Stone; and many a home-staying woman has put her life into patterns, as white artists do into books and pictures. The weaver may put her whole soul or secret history into her work, gathering suggestions from everything about her. One large and marvelously artistic basket with concentric rings diminishing at the bottom to a dot was explained. "With touching pathos the maker said she intended that the lessening circles should determine the lessening power and numbers of her people." She said when her people first arrived, they were under the direct smile and approval of those above, were great as the larger circle; then came the *padres* and took away one privilege after another until they were reduced to this (pointing to a smaller circle farther down); then came the Mexicans who brought further curtailment; then the Americans, and the circles representing her people grew smaller and smaller until soon only the dot and then

¹ Indian Basketry. N. Y., Malkan, 1901. 274 p.

nothing would remain. Another basket showed flying bats supposed to suck the breath, to hold propitiatory offerings to the higher powers, to keep away these and all evils; this basket took almost a lifetime to weave. Another made by a widow, whose husband was shot by Jim Farrar, is told in H. H.'s "Ramona." She could not sleep from grief and gazed into the night sky thinking of what the *padre* said that there she would meet her husband. So she hoped long and loved the stars and in token of this and her grief made her star basket. But she waited long and could not go to the skies, and so found the basket a liar. It said go, and she went not, and so she sold it. Although greatly excited when it was brought back to her, she would not take it again, for she had abandoned hope and the promises of religion. In another basket, circles stand for the villages of the Sabobas, with a link to connect them; above were mountains with the sun peeping over them into the valleys; there was an evening and morning star to assure the makers that those above had not deserted them. Another with many stitches and crosses was thus explained by the weaver: she was often tired and angered at the domineering Whites and, as she lay down, gazed at the stars and the Milky Way and longed to die that her spirit might walk this path of light and look down upon the Whites in the trouble she hoped would punish them. Often, too, on their sashes and buckskin shirts are emblazoned their signs of the heavenly bodies—rainbow, fire, hail, butterfly, snake, beetle, and other powers to which they appeal for aid in hours of distress.

All these and many more lead up to another conclusion which years of study of the problem of industrial education has confirmed in my own mind—and that is the urgent necessity now of *books on the leading trades* addressed to the young. The leather industry, particularly boot and shoe manufacture, is perhaps the most highly specialized of all in the sense that an operator may work a lifetime in any one of the between three and four score processes through which a shoe passes and know little of all the rest. Now the *Shoe Book* should describe hides and leathers, tanning—old and new methods, with a little of the natural history of the animals, describe the process of taking them, of curing and shipping, each stage in the factory, designating those processes that require skill and those that do not, and so on to packing, labeling and shipping, with descriptions showing the principles of the chief machines and labor-saving devices, at any rate so far as they are not trade secrets; it should include a glance at markets, prices, effects of business advance, depres-

sion and strikes, perhaps something about the hygiene of the foot, about bootblacks and what is done for them, history of the festivals and organizations from St. Crispin and the gilds down, tariffs, syndicates, societies, statistics, social conditions in shoe towns, nationality of operatives—all these could be concisely set forth to show the dimensions, the centers of interest, the social and commercial relations of the business, etc. What is not yet realized is that all these things could and should be put down in print and picture, almost as if it were to be issued as a text-book or a series of them; all this could be done to bring out the very high degree of culture value now latent in the subject. Just this is what pedagogues do not and will not see and what even shoe men fail to realize; viz., that the story of their craft, rightly told, would tend to give it some degree of professional and humanistic interest and dignity which the most unskilled and transient employee would feel. It would foster an *esprit de corps*, pride in membership and, above all, an intelligent view of the whole field that would make labor more valuable and more loyal. This material, once gathered, should be used in some form in all industrial schools and courses in towns where this industry dominates. It would bring a wholesome sense of corporeity, historic and economic unity, would give a touch of the old gild spirit, and more power to see both sides on the part of both employers and workmen. Nothing is so truly educational in the deepest psychological sense of that word as useful information vitalized by individual and vocational interest; and at the present psychological moment, nothing would be more helpful than a book each on some score or more other great industries. It cannot be too strongly affirmed or too often reiterated that industrial leaders and corporations should take up without delay and with such aid as expert economists and others could give, not entirely ignoring the view point of the social welfare worker, the task of distilling, putting up and labeling the wisdom of each craft edited broadly and up to date with copious concrete instances as a *vade mecum* to their trade. Training in manipulation under the most skilled artisans is not enough. *The intellect must be strongly appealed to.* The knowledge of all should be culled and curricularized. The business itself should be an object of

study—its social influences, its relations to human well-being: longevity, health, fecundity, so that a vocational bureau could use it in advising individual youth as to their calling. Not until something like this is done can we ever hope to lay any solid foundations for industrial education. This, then, is the problem that pedagogy to-day puts up to industrialists: e. g., to manufacturers who are generally very ready to suggest, urge, and profit by such modifications of the curriculum as will relieve them of any necessity of training their apprentices, and will prepare and perhaps incline young people of the community to render them more effective service. By coöperating thus they can save themselves from the charge of seeking to advance their private interests at the expense of our educational system. Thus they should be invoked to open up with as little reservation as possible everything that can have educative value. Labor and capital should both be heard from with impartial scientific frankness. The less suppression, the greater the ultimate advantage and, even if temporary difficulties resulted, there would be good in the end because a spirit of increased coöperation and a larger field of common interests would be certain; and trade spirit, trade pride, similar in psychic quality to that of the so-called learned professions, would be gained and, most valuable of all, new psychological forces so intangible yet so potent would be set free and enlisted in the advancement of unity and solidarity.¹

The same holds true with, of course, infinite variations of detail in the domain of every great and, to some extent, of the small industries. This is a crying need for metal workers, paper makers, wool and cotton textile laborers, coal and other

¹ Moving pictures are beginning to show their value in industrial education. By judicious selection and composition of films, scenes, the scientific processes in iron and steel work, the story of the railroad rail, steel plate, boiler making, casting, forging, also plate brass and bottle making, the construction of church bells, wire rope, cordage manufacture, mining of various kinds, gold washing, the making of money—both coinage and bills—as well as shoes, hats, clothes, machinery, farming processes, shipbuilding and loading, transportation of produce and live stock, bridge making, submarine work and tunneling, whaling, all kinds of sports, and even battles. Film photography can slow down rapid processes by stretching time and can accelerate slow ones; and can even reverse events. With suitable explanation, this most marvelous pedagogic instrument with more promise and potency in it for education than any discovery since Gutenberg can be made of indefinitely potent efficiency here.

miners, dyers, dressmakers, milliners, typothetes, stone cutters, masons, etc. It is also needed in the *food trades*; for instance, the problems of fisheries and fish markets and hatcheries should be set forth in compendiums, wise and up-to-date form. The same is true of milk and the dairy. I have been amazed to see from one of our social surveys how instructive and edifying is the compilation of facts pertaining to the egg and poultry business of a single city. The same is true of meat, cereals, bread, bakeries, drinks and all the staples of the table. Each needs book presentation according to a carefully prepared scheme which would, of course, have to be all the time departed from. Geography, history, arithmetic, and even English could be developed incidentally. To throw a topic from the focus to the indirect field of mental vision with the young is often itself a wondrous gain. There is plenty of opportunity for recording triumphs of enterprise, epochs that are fateful for the future, for bringing out economic principles in a most striking way, for showing political relations, etc. All this we simply must have before any industrial curriculum that is adequate and effective can be complete; and the same is no less true in educating for financial and commercial occupations.

This vast domain of producing, making, and distributing what we have come to call "goods" (as if these products had a monopoly of this term) absorbs most of the ability and of the effort of the adult world to-day. Here the struggle for survival is most intense. What we call business is a great booming world, the laws of which we are only beginning to understand and where science will always have to be far behind actual life and experience. Business has long since subordinated the legal, to say nothing of the clerical and medical and technological professions which it supports. Its enterprise rules the world. It is setting new fashions in art, as well as in industry, and demanding new standards of efficiency in school, college, and university, urging trust methods of bookkeeping upon the higher institutions of learning, recommending its modes of measuring capability and dealing with those who grow ineffective; it has its own very voluminous, scattered, special, technical literature, but there is no adequate introduction, no bridge over which interested and

ambitious youth can enter during the years of study when books, whatever the practical man may think of them later, get in their chief work during the reading age, which is the teens. The American boy and youth in general, almost in exact proportion as he is vigorous and ambitious, feels these throbbing interests calling him. He also feels that he is removed and isolated from them in the schoolroom, becomes restless and leaves, because he wishes to find some point of entrance into the world where adult men live out their lives. Perhaps he takes a job on the outskirts of the industrial world, soon masters its petty details and the modicum of knowledge it requires, and then, feeling that he is neither learning nor advancing, drops off and tries another approach. Despite much recent progress, the school method and spirit is still too often about what it would be if its main purpose had been to shelter and protect young people from industrial and commercial interests, insights, skills, and keep them immune from this contagion.

If I were charged with the development of, e. g., a textile school in a city of looms and spindles, I should want at least a year of preliminary work. I would study and try to practice every process of every type of labor; I would ask the leaders to tell me all they could suggest or I could ask about; I would sketch the history of each great plant in town and the story of the development of the industry itself, take photographs, get statistics, interview all the wiser workmen, find out every possible point of contact of the industry with practical science, also with legislation, its relations to other occupations, its hygienic conditions, power and its distribution, periods of prosperity and depression, labor troubles, etc.; I would insist upon the frankest and heartiest coöperation on the part of all concerned and require *carte blanche* to use everything of pedagogic value in the largest sense of that term; and then, with the aid of such material, I would strive to grade and curricularize what seemed most needful to develop the maximum of culture and skill which always should be combined, utilizing every comparative ray of light, from the experiences of other cities and lands.

Thus, in fine, if the school is to help business, the latter must contribute to it. With all our school-mastering and

school-mistressing, with all the lesson-setting and lesson-hearing and our thousands of text-books and courses, the higher pedagogy in many fields and respects is dead among us. These are educational Dark Ages. We have so lost touch with our children in home and school that we do not realize what vital contact with them means. We have no idea of our own decadence, no respect for our own craft as instructors, and do not know what teaching is, means or can do, so that we need a great, widespread, pedagogical revival and renaissance in industrial as in moral training, for we are hardly awake here, but in a sleep perturbed happily now by disquieting dreams. We fear and falter when we should rise to the higher pedagogic statesmanship which the history of the few great creative periods in education should teach us. Hitherto we have studied this history for its practical details. Now we should focus upon its greatest reconstructive periods and profit by their lesson. We need to make a very comprehensive survey and lay out new pathways from the frontier of adult endeavor down to childhood.

How did the *church* come to its power? It built schools hard by the cathedrals and cloisters, wrought out a body of doctrine (which means teaching), with elaborate modes of inculcation for novices, adepts, acolytes; it drilled, taught, initiated step by step, and penetrated every department of life, devised liturgies, rituals, ceremonials, festivals, pageants, dramas, grafted upon every pagan belief, rite, custom, and myth, always giving each some more spiritual meaning; it revised and renamed the old pagan ways and modes of worship, graded, adopted, and adapted, instilled, drilled, and thus led the young people and the always childish masses over into acceptance and discipleship. For the supernaturally minded, there were edifying miracles; for the insightful, profound mysteries; for the intellectualists, a theology that expressed and exercised the highest powers of reason. The more we know of the history of the mediæval church, the more clearly we see that it won its way into the minds and hearts of men, not by the force of a few sudden, wholesale transformations which have attracted the most attention because they seem most striking and have been best recorded, but by generations of coöperative, devoted and laborious pedagogical engineering. Doctors were all teachers, as the name implies. Under their influence the *trivium* and the *quadrivium* were slowly evolved; and these were the most belabored, as well as the most lasting of all curricula in history, admirably adapted to educate all from the lowest to the highest grades of service. This great course was a more or

less genetically ordered epitome of the knowledge of the age adjusted to each stage of proficiency.

Again, take the *pedagogy of Latin and Greek* as slowly evolved by the work of grammarians through many centuries of classical literature, which laid under tribute the philological elements that were found in the parts of speech, most of which originated with Aristotle. These were ordered, paradigms were selected, rules formulated with copious illustrations and exceptions; lexicons ever more complete were compiled; and thus another great educational highway was opened well furnished with handbooks; and so well was this work done and so perfectly systematized that it has dominated even the teaching of modern languages, and to many has become an end in itself instead of a means. Now this apparatus was designed for severe discipline and memoriter methods of teaching and learning, and it made possible the early and relatively easy mastery of the dead tongues, so that they were kept alive long after the races that spoke them had declined or died. The method acquired such momentum that it still dominates in many class rooms, and its pedagogical traditions are so strong that although the spirit of the ages changed and the goals to be attained—namely, the knowledge of literature or the power to speak and write the tongue—have fallen, the method and spirit still blindly persist where all sense, feeling, and knowledge of the real spirit of Greece and Rome are absent, and even in Protestant lands where the ecclesiastical uses of Latin are unknown. The same lesson is taught in the history of the pedagogy of number: the four species, the rules, tables, procedures, often the very problems themselves, are products of a long consensus of effort which sought to make plain the way of the learner and which also still survive because, like some of the old Roman roads, they are better to-day than the cheaper modern ones. It is also better set with milestones marking the various steps toward proficiency.

Thus the great churchmen, classicists, and mathematicians taught and wrought for the young, and found delight in guiding and inspiring and in interesting them in what they were interested in. Perhaps celibacy, which deprives men of offspring, gave psychological motivation to what must have been a genuine passion for spiritual fatherhood in aiding the unfoldment of youthful minds. These systems were incessantly belabored by the most advanced adults. On the other hand, never was there an educational system so widely divorced from the chief interests of adult life all the way from grammar school to college as ours to-day, never one so pervaded by influences that alienate interest in labor, skilled or unskilled. Academic youth graduate with the ideal of finding

a ready-made place rather than of making a position by earning a livelihood which represents real service based upon genuine effort. Exemption from every earning activity during the plastic and active years of youth is itself a danger, and immunity from business knowledge is often sought by students until the inevitable hour comes. A long experience in spending money does not prepare to earn it. The few favored and exceptional youth who, after taking their first degree, for the first time don overalls and begin at the bottom of the ladder in a chosen business, show a commendable spirit; but they do this wastefully late, and should have begun to work earlier, and combined labor and study from the first. Latin may possibly help the general intelligence of a master mechanic; but if it does so, it is only in an infinitesimal degree, and the same time and effort put into the theory and practice of his vocation would have yielded vastly more culture power as well as made him more serviceable, because there would be nothing left to atrophy. Erudition and effort in lines later to be abandoned do not leave the faculties as a whole stronger but weaker. Primary ignorance in a subject is interesting; it often gives strong curiosity while secondary ignorance is both devolution and disenchantment.

In view of all this, it is now most pathetic to see the innumerable schedules, hour plans, courses, improvised so readily and launched so complacently, as solutions of the pressing problem of industrial and business education. The superintendent in a one-industry town, for instance, whacks together a *mélange* of stock school studies, a little manual training and it may be shop work, and feels that his local problem is solved. True, many of these courses are approximations toward the goal, but very slightly and slowly. Moreover, they nearly always omit the one cardinal thing which is the combined humanistic and pragmatic culture-core that is or should be always found at the heart of every industry in its relations to others, to society, and to human well-being, that only a systematic and exhaustive survey can ever hope to bring out. *Every industry has a purely humanistic element* in it, or it could not win the lifelong devotion of those engaged in it. And whoever succeeded who did not love his work? If this element is even relatively lacking in any industrial line, it

should be found and restored, for it is one of the most precious of all assets even from a mercenary point of view. These teachable factors here postulated would, of course, be those of honest, honorable business and not those of deceit and fraud; and this would tend to preform the youthful mind to industrial integrity.

Employers complain of the lack of skilled labor, and some say they could double their output if they had it and could get trained foremen; but the vast majority of them are utterly unskilled themselves in handling their human material, and many of them are densely ignorant of even the existence of the vast problems now challenging them here. The economic loss which results in the form of friction, lack of interest, carelessness, needless waste of money, breakage, and wear of tools and machinery, is comparable to that of great national resources like our forests. As long as workmen are regarded as parts of the machinery, to be dumped on the scrap-heap as soon as younger, stronger hands can be found, the very point of view needful for the correct solution of vocational education is wanting. If corporations are soulless and impersonal, and stockholders with no contact with plants are intent only upon maximal dividends, as long as short-sighted policies demand only quick returns and large present profits upon investments, little permanent progress is possible. If capitalists lack humanity, they should at least be shown how for their own interests the greatest care should be exercised in maintaining the loyalty of their workmen, which ideally should be no less than that of collegians to their *Alma Mater*. Their comfort, contentment, peace of mind, are precious assets with high commercial value, which it would pay to cultivate, even at great pecuniary outlay. The time will inevitably come when, as experts are employed to look over every stage and to see how every process can be simplified and cheapened, every waste and by-product and even refuse profitably worked over, so expert social psychologists will be employed to eliminate worry at home, bad food and cooking, and to find out ~~saw~~ and sore friction points that need lubrication, so that the human machine will work with the least loss of energy; they should anticipate danger and remove trouble before it reaches the fulminating stage; such an expert should also be always

on the lookout for every possibility of the expression of individuality, and make not only those capable of originality, but all feel that their work is worth while and not merely a commodity reluctantly and coercively bartered on the hardest terms; every sign of responsibility as well as ability should be recognized in the interests of facilitization. The sense of injustice is a dangerous and explosive thing in the human soul. Instances where greater attention to the nature and needs of the toilers themselves has demonstrably paid should be gathered and systematically presented, to show the advantages of the coöperative spirit and methods. Carnegie said that, given his business methods, he could start over again with nothing and reacquire his fortune. What these methods were, we should know and teach and see how far they illustrate or lack this humaniculture; and where the latter, how at each point it could be best added.

Employers should see and admit their own need of education, on the principle of *noblesse oblige*, if no other. Advertising is now a department of psychology with its own literature and very educative laws with great culture power in education. The same is true of buying, selling, and bargaining. The experts in these lines should give up their secrets. There are the arts of window display. Experts here and there should devote themselves to exposition. The devices and experiences of drummers, who are often the very ablest and shrewdest business men who have perhaps been small or more often are to be great proprietors, should be gathered. The modes of accounting in banks and the devices used by clerks in addition, multiplication, computing interest, etc., should be taught and practiced in business schools, not from the great firms, each in its proper place and grade; and so should concrete cases where experiments in profit-sharing have contributed experimental data. All these fields are rich in resources to the cleverly conducted *questionnaire* method in both its written and oral form. The same is true of modes of selling products in foreign lands, where other languages are spoken and other fashions and perhaps needs in the texture and coloring of articles prevail. Packing, too, is often a fine art that would repay expert colligation and utilization. How consular and other reports are prepared and how meth-

ods of doing this can be improved, brought up to date, and made more valuable, is another theme. Tariff schedules for each article and how bills are prepared, class legislation carried through, and even detailed modes and instances of corruption, the principle and methods of trusts, the histories of great corporations, etc., should be taught with scientific and academic truthfulness. Rockefeller should contribute an accurate account of his methods of bookkeeping. All these things should be given to enrich courses and bring the higher dispensation of business education, which now is diluted, superficial, and remote from vital, practical affairs and has hardly begun to do what it should and might. Again, every business man in the community should be laid under tribute to appear in person before classes and tell his experiences and his problems in a confidential way, reserving nothing which could be a great service to the young who have a preëptive right to all he can communicate that could have a stimulating and educative value. It is not alone the private needs of his own concern in the way of this or that specific quality of knowledge or skill that pedagogy needs, but also to know things which occupy his own most serious and strenuous hours. This in the larger interests of the future, he should confide to the rising generation. Thus he will himself taste some of the rewards that go to the true teacher, and will be all the stronger for the revelation, in his own work.

The entire industrial life of the nation is now more or less imperiled, so that industrial education is now imperative to maintain and advance our present position, if not indeed to prevent early decline. Present conditions of life in the great factory centers throughout the world are bad. This was strongly brought out some years ago by Arthur Shadwell.¹ In our country commercial push, individual enterprise, leadership, have so far won our great successes. Free trade is to buy cheap and takes no thought of the selling price; while protection is to sell dear. Success does not depend upon either of these, but on the relations of the two to each other. A protective tariff is a tax paid by the home community to insure the producer a remunerative price. It stimulates like a hot-

.. ¹ *Industrial Efficiency*. London, Longmans, 1906. 2 v.

house and sometimes enables companies to sell their surplus abroad at a very low rate. This is called "dumping." It is command of the home markets thus insured that enables producers to make combinations, control prices, and manipulate the markets, which they could not do were they open to all competitors. Labor is paid more and produces less than it did.

In England, according to Shadwell, "work is a nuisance, an evil necessity, to be shirked and hurried over as quickly and easily as possible to get to the real business of life" which, as he goes on to say, is sports: racing, cricket, the public house, pleasure, and self-indulgence. In winding electric coils, the rate became slower and slower until a single coil took ninety minutes; then girls were put on "and did more before breakfast than the men did all day." Such leave school with no thought of duty and no sense that the position of the country was won by the hardship and toil of generations. Workers level down and not up. They would drag the industrious and energetic to the standards of the shirks and loafers. "Labor is paid more and produces less than it did, till now wages have risen beyond productivity." The workmen's idea of life is holidays. They do not use their high wages well. Instead of spending it for homes and saving it, it goes for drink, pleasure, and perhaps gambling. The laborers now travel at a price that does not pay the companies; but they demand transportation free. Some think the state should feed the children of the poor. Politicians promise anything if at some one else's expense, and whatever a laborer asks is given him like a spoiled child, whether it is good for him or not; this is the rule of the nursery where children govern men. Workmen are ceasing to save; their very amusements are childish, and the pauper spirit of dependence is growing, as the glory and honor of parenthood is shirked. A Russian writer says that during the last thirty years the English people have become mentally, morally, and physically rotten to the core. "The Russians would consider the condition of the poorest laborer in England luxurious." Politicians rarely tell them that their troubles are due to themselves, but indicate that they can be removed by an act of Parliament. One experienced workman advocated a judicious system of universal military service and thinks that this discipline would confer more real benefit on the laborer than a raise of thirty per cent in wages. There is very little of the splendid Japanese spirit of devotion to the public good. "A man who earns ten dollars a week and spends half of it on self-indulgence is demoralized by wealth no less than Hoggeneimer, the millionaire." A certain business needs very strong, well-paid men with a skill that can be acquired in a few weeks; so they import Irish youth from Donegal; they come sober, but in a few weeks are the hardest drinkers of the neighborhood, destitute at the end of the

week and clamorous for more wages. We identify progress with the gospel of ease. Hard work we deem an evil, discipline degrading, sacrifice monstrous, and suffering intolerable, and duty obsolete. Who ever gave a pipe, a glass of beer, or a new hat, or a ticket to the theater during the recent hard times? One writer estimates that four fifths of those who inherit wealth lead idle lives, and their follies and vulgar extravagances set bad examples. The hoard of shirkers and wastrels which the ease theory has created and the pressure of the unemployed are evils that are now beginning to be realized. This view of English conditions may be extreme, but there is much in it from which we should profit in this country. In Germany the workman has not at all been left to work out his own destiny, but has been guided and helped at every step by individuals, departments, cities, and by the state. There are factory codes, a scientific tariff, state insurance, organization of transports, merchant marine, education, poor law—everything on a high level, so that recovery from depression is rapid. Small as is the wage, a workman "can be strong, happy, and healthy, and behave like a gentleman on what he gets."

In America we have trusted to audacity, push, novelty, inventiveness, rivalry, cupidity, managerial control, excessive specialization, so that if a workman is smoothing a bit of ivory on one side, it is turned by machinery for the next man to smooth on the other. We screw up everything that is slack, and do all in our power to increase the output, relying chiefly upon the abundance of our raw material and upon our high tariff. Kreuzenpointner¹ thinks that without industrial training America cannot keep its present position more than twenty years because of tightening economic conditions, the decline in the quality and quantity of resources, and increasing population. The commission of six educators which Germany sent here in 1909 reported that it would be many years before American industrial education would approach the efficiency of theirs. It will probably take twenty years for the masses of the people in America to reach the degree of intelligence and philosophic thought necessary to do what should be done now. "Thus we must make a new generation to develop the mental power of grasping the breadth and depth of this problem." Our habits are wasteful. The foreigner can work under pinched conditions and tighten his belt.

¹American Machinist, May 20, 1909.

He does not demand two kinds of pie in his dinner pail, nor would brown bread in it condemn him to the level of the Dago or Slovak. Some time we have got to face the competition, e. g., of the highly skilled Belgian mechanic in blue blouse and wooden shoes, living on sour milk, peas, lentils, and perhaps a little meat on Sunday. And then there is the Yellow Peril now looming up ominously in the distance. "If we had the use of five hundred million dollars and could train a hundred thousand teachers in a week, we should still be handicapped by the retarding condition of our schools, and especially the unfriendliness of the high schools toward it." Our decline in certain respects has already set in: during the last five years Germany has doubled her sale of machinery to this country, and Belgium has trebled it; although we think ourselves the greatest machine builders in the world. An American agent went to Mexico to sell goods, stayed a week and sold nothing. A German agent then came along speaking the language, knowing the money and trade relations, loafed about and studied one week, and the second week sold ten thousand dollars' worth of goods in the same line. F. J. Miller, editor of the *American Machinist*, thinks German workmen technically overtrained and prone to depend too much on what they have learned in school; they cannot think independently, and their shop experience is not sufficiently emphasized. Vanderlip says that our preëminence now rests solely upon cheap raw material, genius for invention and combination, and cheapness of production, but not on the quality of goods. Industrial centers as a rule are gloomy, sordid, unwholesome, and utterly unfit for children, whose primary right is air, light, exercise, joy, food. Thus industrial education has a great national problem to solve. Why should it not clear our way in Porto Rico and the Philippines?

What are the plain, cold, sun-clear facts? They are these: Never in all history did such a vast and varied wealth open to mankind as in the *natural resources* which the white race found as it advanced across this country. The soil was rich; the prairies teemed with harvests without fertilization; the forests were wide and dense; the mines rich and varied, and there was natural gas and oil in abundance. Immigrants flocked to our shores. Everyone worked hard, and wealth

has been accumulated by leaps and bounds and our prosperity has been almost unprecedented. Power and raw material have been abundant; our home markets vast, and stimulated by a high and growing protective tariff. Now, however, all this is rapidly changing for the worse. As the Convention of Governors in May, 1908, declared, "Our very civilization depends upon the conservation of our natural resources." Of the three million square miles of mainland, only one fifth is cultivated, and by a trifle over one third of the population. Prodigious as are our crops (one third of the corn, two fifths of the wheat, two thirds of the cotton of the world), the yield per acre of grain at the last census was 11.38 bushels (about one third the best Belgium amount), or not far above a good rental where cultivation is up to a high standard. Mammal pests destroy \$100,000,000 worth annually, and insects about six times that amount, and most of this loss is preventable. Brewers take about 50,000,000 bushels of grain per year. We use 100,000,000,000 board feet of lumber annually, which will consume all our timber in about twenty years. At present we use up about forty-five square miles of our forests per day. One computation makes 500 feet per inhabitant, as against 60 in Europe. Forest fires, preventable at one fifth the wastage they cause, are responsible for about 100,000,000 feet annually. We are so wasteful that of every 1,000 feet of lumber only about 320 are actually used. Roosevelt called the forest question "in many respects the very most vital internal problem for our people to-day." Deforestation means drought and desert and loss of the soil, and as about fifty-nine per cent of our buildings are wood, it would also mean great dearth of habitation. Both gas and petroleum will fail us about 1950. At the present rate of increase, our anthracite coal will be all gone in seventy years, while our bituminous will last on about seven hundred years.¹ Here our chief waste is in processes for utilizing the energy of these heat-producing agencies. Carnegie thinks that in forty years all our large deposits of high-grade iron ore will be worked out in this age of steel. Copper has already begun to be exhausted, and

¹ Many of the above facts have been compiled by Professor M. G. Bogert. *Journal of American Chemical Society*, February, 1909.

that, too, just at the dawn of an age of electricity for which it now seems indispensable. Again, our immigrants were once from Great Britain, Germany, Norway, Sweden, and Switzerland. They were ambitious, industrious, skillful. Now Southern Europe sends hordes of unskilled and untrained Latins and Slavs, and those who come here grow infertile almost in direct proportion to the time they have been here and as they grow in intelligence and effectiveness. Unskilled labor has grown shirky in the same ratio as it has grown high-priced, till in some parts of the country all progress and prosperity are seriously handicapped. In the foreign markets we are already beaten on many lines and are steadily falling behind European lands.

Under these conditions it is no wonder that industrial leaders, who in this country chiefly shape our affairs, are asking, "How can we make our school system, upon which we spend more money than any other people, fit the children for their life-work and furnish our industries, which are the ultimate source of our national prosperity, and even existence, with the army of skilled and willing workers they need?" Our schools were created to fit simpler conditions when the home was the center of industry, which is now passing to the factories, and before science had become vital to manufacture. Now, practical life has drifted away from the school and left it isolated and unresponsive to the needs of the time. Business men, says E. A. Rumley, must come to the rescue at this crisis and give education a new impulse. The problems here are of international dimensions, and we are probably on the eve of an educational awakening such as history has not yet seen. The time is at hand when we can no longer depend upon the abundance of our natural resources, but must put a larger portion of brain into brawn. We must have economy and men who have been trained from childhood to feel interest and pleasure in their work and who give a full day's work for a full day's pay.

The other great nations utilize their physical sciences as the intelligence department of industry, Germany leading particularly in applied chemistry and physics. About all manufacturing processes that transform raw material to finished products, on which future supremacy must depend, rest more

and more upon science and the progressive economic utilization of waste products which we squander. Of the total rainfall in this country, estimated at about ten Mississippi, eighty-five to ninety-five per cent is wasted in floods and freshets washing a billion dollars' worth of the soil into stream beds and the sea, and which in 1900 did damage calculated at \$238,000,000, a large part of which was really unnecessary. Our inland and coastal waters are more and more polluted, and water power, upon which electricity depends, declines with the forests.

We waste human material. That our pure-food and pure-drink and other hygienic laws are not enforced is notorious; nor is child-labor legislation, which is so economic of humanity. It is said that in no state or city of this Union is legal provision made for the rest of working women approaching or after confinement, which is so necessary for the welfare of their offspring. The insurance against sickness is hardly begun and old-age pensions are really but iridescent desiderata, while the slaughter and maiming of thousands of workmen by accident which might be prevented is appalling. Moral sanitation, too, lags and loiters. A nation that has so unprecedentedly lost its sympathetic touch with childhood, as I have elsewhere shown that we have done, has in so doing, of course, necessarily lost vital contact with the future in which our children are to live. No race probably was ever so unmindful of posterity. We are so content with happy-go-lucky ways, so in love with *laissez faire*, so implicitly trustful of destiny and so convinced that the voice of the average man is the voice of God, so sure that everything will go booming on with an ever-accelerating rate of progress, that, enervated as we are by our prosperity and inflated with our sense of greatness, it is hard for us to grasp the great problems that confront us. We are sunk in the present, proud of the fact that we are in a sense a fiat nation with only a rudimentary historical sense. We have no time to think how we shall look as ancestors to our successors a century hence, or what kind of social, industrial, moral, to say nothing of biological, heredity we may be handing on to them.

We must add to the vast wastage of human culture avoidable friction between capital and labor and the loss of sympathy,

where a community of interests should make for unity and solidarity. Unrestricted competition dumps men and women in the scrap heap the moment fresher and more remunerative recruits can be found to take their place. The greater the corporation or trust, the more soulless, impersonal, and irresponsible it becomes, and this is the land and age of great trusts to whom everything seems allowable that would increase dividends year by year. The adventurous, not to say gambling, spirit is in the very atmosphere that risks and takes chances to the limit, small if not large, provided there is possibility of golden realization, ever so faint though it be. Everywhere this tendency is helped on by promoters and all the seductive psychological arts of advertising, till most of the best of our common people take hazards with fortune with at least a margin of their resources. Since the depression a few years ago, even we teachers, scanty though our means be, are flooded with alluring prospectuses of new and old business ventures and get-rich-quick schemes in which we are importuned to embark. I have a pile of these a foot high when opened flat that have accumulated within a few months, and our leisure and our homes are often invaded by plausible and often quite impressive strangers who would sell or even give us shares of stock specially designed to yield large and sure returns to the meager savings of people engaged in our noble but poorly paid vocation. These itinerant and insistent peddlers of securities, gentlemanly though they be, sometimes have to be excluded from our academic halls and buildings. The arts of the able army of drummers are often too much for retailers, who are induced to overbuy and then in turn crowd their wares upon their customers. Our selling agencies are so effective that who does not know women who are unable to resist the blandishments of clerks or the temptations to buy or the intoxication of the shop window and the bargain counter and mark-down sales. In some cases they fill home, closets, and bedrooms with an accumulation of things purchased, piled, unused and unopened, and sometimes forgotten, so fascinating is its very fancy of cheapness and so exciting to artificial wants not based on needs.

Again, in our advocacy of peace and arbitration we should not forget the advantages of *military education* and what the

world owes to war. It has slaughtered millions of the best, strongest, and most patriotic, and left the feeble at home to propagate the race. It has also promoted robust physical and moral training, and is so rapidly improving that many thoughtful men have urged that its benefits should now be extended. H. Birchenough¹ advocates that military training be made compulsory for every active British lad from about fifteen to nineteen, as a kind of continuation school, not primarily to make the country more efficient in war, but for its moral and practical value for physical betterment and the increase of industrial efficiency. In Germany, as all know, the attainment of a certificate as *Einjähriger*, or one year volunteer which is granted to those who attain *Obersecunda* in a first-class gymnasium, or *Realschule*, at seventeen or eighteen, or a higher grade in other schools, stimulates thousands of German youth to stay at school up to this point, as otherwise they would have to serve two years in the infantry and three in the cavalry or four in the navy. This stage confers considerable social distinction. The volunteer must board himself, supply his uniform, and very likely lives at home most of the time except six weeks. He can choose his own year from eighteen to twenty-three—under certain conditions to twenty-six. This, of course, means a certain standard of ability and training, and employers have come to attach great value to this. Moreover, all who serve this one or who take the otherwise required two years, although they interrupt their careers (and many have come to our shores in the past to escape this obligation), are now more and more thought to be benefited by it, on the whole, as is the country at large. The military service is a kind of liberal education for youth in the humbler walks of life. It gives much advantage of travel and association, and, better yet, young men learn the benefits of discipline, duty, regularity, plain living, habits of hard work, neatness, obedience to authority, a sense of honor, love of the fatherland, better ideas of hygiene. It is, on the whole, a splendid setting-up drill, and those who have had it emerge from this barrack life almost always better in health

¹ Birchenough, H.: *Compulsory Education and Compulsory Military Training*. *Nineteenth Century*, 1904. Vol. 56, pp. 20-27.

and morale, with larger intellectual interests, with a quickened sense of loyalty and devotion to the country. The recent reforms in the army and the new responsibilities which officers take for their men and the moral instruction they give, I have pointed out in Chapter IV. It should be added that a knowledge of military affairs is a vast culture domain of its own. One needs only glance through a military encyclopedia or turn the leaves of such serious studies as Poten,¹ Tardieu,² S. R. Steinmetz,³ or study Nietzsche to realize the advantages of the aggressive soldierly spirit and attitude. To be chosen by the state, taken away from the home environment, and made to serve the fatherland with a possibility of offering up life upon one's country's altar gives seriousness, poise, and right orientation, implants not only love of the flag, but *esprit de corps* and regimentation. It abolishes rank and social station, and brings a spirit of comradeship, a feeling of good fellowship that may persist through life, and it is believed that now the army is rapidly becoming in all civilized lands a more effective school for personal virtue than ever before. It brings, too, its own peculiar sense of honor.

Here, too, should be mentioned the suggestion made by Carlyle, Kingsley, and more elaborated by Ruskin, and now by adherents of the Peace Movement, that great advantages could be secured by drafting or enlisting, or even, in some cases, requiring, criminals for a term of years to engage in great public works for the public good. This they thought a moral equivalent of war. Militant Christianity has long praised and besung the virtues of the Christian soldier whose aggressiveness is moral and directed against sin. But the same spirit could be given a more definite direction should our Government open conscription offices and enroll young men to dredge in rivers and harbors and at Panama, to serve the state or community in all the great industrial enterprises of state or city, to clean streets and sewers, to build irrigation dams

¹ Poten, B.: Geschichte des Militär-erziehungs- und Bildungswesens in den Landen deutscher Zunge. Monumenta Germaniae Paedagogica, Vols. 1, 2, 3, 5 and 15.

² Tardieu, Eugène: *Notions de Psychologie et leurs applications à l'éducation militaire*. Bruxelles. 1898 p.

³ Die Philosophie des Kriegs. Leipzig, Barth, 1907. 352 p.

and systems, to work in squads and under command for a definite term, with desertion penalized and duties enforced by military methods. Why could not the same beneficent results be accomplished as by training for war? The *morale* of our soldiers whom Roosevelt made to dig is said to have been greatly improved thereby, and this experience made them better soldiers. All this work must not be tainted by the spirit of the chain gang, and seems at first hardly compatible with the spirit of free institutions, for it would deprive men of the full recompense for their toil, and would have some taints or traits of slavery about it which it would take generations to remove. To educate public sentiment so as to make it as honorable to dredge as to maneuver and parade is a gigantic task, especially if this work began with wastrels at the bottom of the social and industrial scale. It would be long indeed before free-born voters could give their consent to be made to work for their country's or their own good. If the idealists, philosophers, and sociologists who advocate such plans would shoulder the pick and shovel and lead the way, demonstrating in themselves, as well they perhaps might, the benefits of such a course, this might give it a certain initial momentum. If the Government could properly support and pay a great industrial army as its employees, sure of permanent jobs, always under orders to go wherever or do whatever was required, and also ready to take up arms and fight in case of war, but trained to do this only incidentally, that might indeed be a boon. This, however, would require a rather elaborate scheme of industrial education as well as hospitals, provision for the aged, infirm, and those accidentally injured, for wives and children, and perhaps, if the Government assumes control of public resources and of all public utility and service, corporations, railroads, telephones, telegraphs, public lands, something like this may eventually be feasible. Such an army would make for peace rather than war, as industry does, for work would predominate. It might tend to bring the Government down to more economic business methods, but we are as yet far from knowing how to conduct our public affairs as economically as those controlled by private enterprises. Until a city or state has learned to do its business as effectively as private concerns, such a dream as this

would not be capable of realization. To increase the number of officeholders, or of those who live and work for the state, would also mean to implant in our schools the spirit now deprecated in France, whose youth are often criticised as ambitious chiefly to get a place and salary and a badge or uniform in the service of the state. At present, speculation in these directions may be safely left to those who cultivate the 1915, 1925, 2000 movements. They are interesting, but are not without some tendency to divert attention from the duty of the present hour which focuses on the next step, which certainly seems to be now to give a more industrial trend to our entire educational system and await results.

- *Commercial education* in this country began with the Bryant and Stratton chain of business colleges about the middle of the last century, and was greatly advanced by the career of S. S. Packard, who devoted more than forty years to this work.¹ These were private, popular, often charged a high fee, and trained clerks and amanuenses. When stenography and typewriting came in, they were quick to discern their value, and added them and prolonged their course. C. B. Ellis² says they came in as a protest against school systems that did not train for life and their inability to hold boys, and to give those not going on a chance. Some of these were very successful, such as the Hefley School of Commerce of Brooklyn, with some twenty-five instructors; Long Island Business College, with sixteen; Albany, with twenty-one; Woods' School of Business and Shorthand, with twelve; Eastman Business College at Poughkeepsie, with twenty-five; and Rochester Business Institution, with fifteen, and many others. Portions of this work were later introduced into public and private high schools, till in 1900 there were 2,350

¹ See James, E. J., *Commercial Education*. In N. M. Butler ed., *Education in the United States*. Albany, J. B. Lyon. 1900. 51 p. 2 v. Also Great Britain, *Diplomatic and Consular Service*. Report on Commercial Education in the United States. London, Harrison, 1899, 55 p. Also Supplement to Fifth Year Book of the National Herbart Society for 1899. *Commercial Education*, by C. A. Herrick, pp. 113-229. 1900.

² Ellis, C. B.: *Commercial Education in Secondary Schools*. *Education*, 1902, v. 22, pp. 631-637. See also U. S. Bureau of Statistics. *Industrial Education and Industrial Conditions in Germany*. Illus. Wash., Govt. Print., 1905. 323 p. (Special consular repts., v. 33.)

institutions of all grades, with 131,518 students, 71,000 of which were in public high schools or colleges employing 1,196 men and 583 women as teachers. Next in frequency came the private high schools, then normal schools. Bookkeeping gave a content to arithmetic, and a boy who could not apply himself to "sums" would work hours to find an error in a trial balance sheet. Shorthand, too, teaches much about language, requires concentration, and keeps the pupil out of a muddled state of mind; while typography cultivates far more than manual skill and puts a premium upon neatness, accuracy, and good English. The work thus has a high-culture value. It came in under protest from the culturists, who feared that the school would be "transformed into an office, counting-room, or bank." Young Americans may lack native aptitude for skilled industries, but they have great ability and taste for commercial activities. These courses have been more or less enlarged and enriched, till now it may be said that business education in this country has acquired some solid standing.

In 1881 Joseph Wharton, of Philadelphia, established there a school of finance and economy, which, although it encountered many obstacles, was developed with great energy and sagacity by Professor E. J. James, who was sent to Europe to study this department of education, and made a very valuable report,¹ in which his many addresses and articles upon the subject are summed up. If the University of Pennsylvania would work with, instead of opposing, the magnificent commercial museum in that city, the best of its kind in the world, as it has evolved under the leadership of W. P. Wilson, this city might easily be the leader and light in this field. The year 1900 was significant in this history, for it saw the opening of departments of commercial education in the Universities of Chicago, Missouri, West Virginia, Louisiana, Nevada, Vermont, Wisconsin, Michigan, Ohio, Arizona, New York, Dartmouth College, the Florida, Montana, and New Mexico and Georgia Schools of Agriculture. The best of these have valuable courses in diplomacy, business organization, finance, insurance, transportation, accounts, advertising, city organization and charter, demography, public opinion, race contact, panic and depression, legal decisions, economic history, trade routes, tariff, growth of water transportation, and many others. On the other hand, too many of these courses are scissors and paste

¹ James, E. J.: *The Education of Business Men; a View of the Organization and Courses of Study in the Commercial High Schools of Europe.* Chicago. University Press, 1898. 232 p.

products, where portions of history, political economy, modern languages, certain topics in applied science, a course by a law professor, and perhaps one from the agricultural school which had been devised to meet other needs, have been rudely whacked together into a course to attract students in this field. The Tuck School at Dartmouth, with a fund of \$300,000, aided by the Thayer School of Civil Engineering, is only open to college seniors or graduates who have attained a standard of seventy-five per cent. It "boldly limits itself to picked men who have completed at least three years of college work and are candidates for degrees." It includes economic and monetary theory, elementary law, sociology, anthropological geography, social statistics, correspondence, public speaking, and at least two modern languages. After a year of this work it embraces financial problems, commerce, insurance, and has a faculty of ten men.¹ In 1908 Harvard opened a Graduate School of Business Administration, with seventeen regular instructors and aided by many outside lawyers and brokers. The Y. M. C. A. has opened more elementary schools.

Of course, Europe is fifty years ahead of us in time. Advocates of this scheme claim that the old idea of beginning at the bottom, sweeping the store and running errands, is superseded, and that business men can now educate their sons

¹ John Wanamaker has a trade school or commercial institute connected with his department store in Philadelphia which has lately been chartered under the ambitious title of "The American University of Applied Commerce and Trades." The beginnings were made some fourteen years ago and there are now nearly eight thousand graduates. The smaller boys have a school session two mornings a week before they go on duty at ten, and three hundred older boys have two evening sessions weekly after a hot supper in the store dining room. There are twenty-four teachers, some of them from the public schools. A military battalion with a garden for drill is a lesson in obedience, precision, and health; military band, drum corps, and summer vacations spent in tenting like soldiers on a five-acre camp ground at Island Heights, New Jersey, with headquarters at the barrack by the sea. The girls, too, have military drill, drum and bugle corps, band, singing, mandolin clubs, saving funds, classes in French and German for those who have to go abroad in their business dealings. When these youths graduate with a diploma, they are full-fledged members of the staff, fitted for some well-defined division. There are special class rooms, library, reading room, gymnasium, swimming pool. This system is the pivot of the organization of the store staff, determining position, wages, and advancement. The work is said to have grown out of the author's realization of the sacred obligations of employer to employee and his recognition that a business career is now a profession and a specialty. High marks here have a money value. We are not told, however, how far these pupils are initiated into the general plan and method of the business as a whole. This would seem to be a matter of vital importance. Many other firms have introduced more or less educational facilities for their employees.

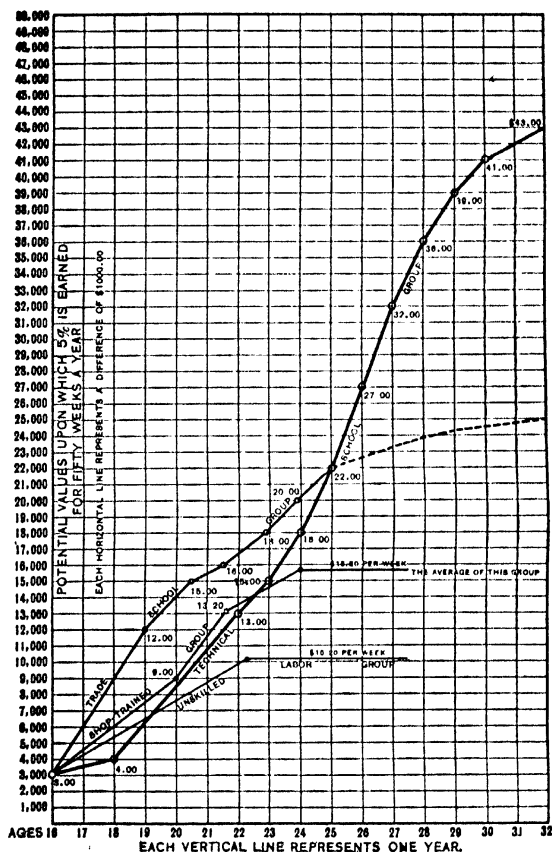
with great precision to take their places, and the prejudice many of them have had against college graduates is no doubt abating. A very large and rapidly increasing proportion of college students now intend to go into business rather than into a profession, for the former is not overcrowded. Surely there is no reason, as the late C. K. Adams said, "why the state should provide means for educating lawyers, physicians, engineers, pharmacists, and agriculturists, that would not equally apply to the education of business men." Many new lines call loudly for the highest grade of business ability, and on the wisdom with which all this is managed the happiness of thousands of families depends. Probably the majority of the talent of this country is absorbed in these occupations. While experience is important, there is a vast body of knowledge here that could be organized and taught in schools with great advantage. Our foreign trade as early as 1890 had reached an aggregate of two thousand billion dollars, our sales exceeding our purchases by five hundred million.¹ We demand a new and rare class of men to manage this, and there is great need of foreign agents for American goods with better training. We have found that we can surpass other countries in the perfection and cheapness of most labor-saving machines, in the building and operation of railroads, construction of bridges, shoes, steel, hand-power tools, engines, mining, and much electrical machinery. We can give more for the money in these lines. One cause of our great success is the "freedom of commercial intercourse between the states, which has furnished a tremendous home market and enabled us to be specialists in all these branches of manufacturing and to turn out nearly everything in wholesale quantities. These cheapening and perfecting processes are still advancing by leaps and bounds, notwithstanding they have already put us far in advance of other nations." Now the question is, how to get the full advantages of the world's market. We lack trained men to solicit business. Our engineers are engaged in great constructions the world over, but we do not fit

¹ See an admirable presentation with 85 charts. *The World's Commerce and Am. Industry*, by J. J. Macfarlane., Phil. Com. Museum, 1903, 112 p. See also *Commercial Raw Materials, their Origin, Preparation and Uses*, by C. R. Toothaker. Boston, Ginn & Co. 1907, 108 p., with maps and hundreds of materials.

youth to go, e. g., to Mexico and South America to explore and exploit. The best European schools do just this, teach-

THE MONEY VALUE OF TECHNICAL TRAINING

(L. M. DOOGIE, MORELEY REPORT)



ing the language, resources, climate, tastes, methods, fitting young men for agents and for consuls. Our consular reports

cannot be compared with the best in Europe, rapidly as they are improving. Our leading business men wish their sons educated. Many of them were not, and have endowed colleges and universities, realizing their own deficiencies. The colleges should repay this debt by better interpreting just what the sense of need of their founders was and meant. Again, it has been said that about ninety-five per cent of business men have failed at some time in their career and that the right education would tend to prevent this and to make business a source of greater pleasure as well as of profit.

Here, as in industrial education, the old prejudice of the culturists has been both strong and pervasive. The sentiment of college youth ranks those in the regular academic course above those in the commercial as in the other practical departments. Even Professor Laughlin¹ says "the essential aim of the college of commerce and of administration should not be technical but disciplinary." He adds that it should not merely give useful information, but principles, mental grasp, teach men to think, etc. Says another prominent educator: "It is not the business of the commercial high school to train stenographers or bookkeepers, amanuenses or private secretaries, any more than it is the business of the manual training school to make boys carpenters or blacksmiths." What is wanted is broad foundations. For one, I believe that the time has come when we must say this is exactly wrong and our ideals and methods of training here must be reversed, that we must give first of all deftness and skill of hand and efficacy in work, and that on this basis the whole intellectual structure can be built both higher and more securely. We must reconstruct our ideals of liberal culture, which is by no means limited to literature and mathematics and language.

One reason why continental Europe was ahead of us in appreciating the need of this training, if not in making it more effective, is because of free trade, which abolished the bulwarks that protected manufacturers. Originally commercial schools in Austria,

¹ Laughlin, J. Lawrence: Higher Commercial Education. Atlantic Monthly, May, 1902. Vol. 89, No. 135, pp. 677-686. See, too, a valuable and extensive collection of opinions made by R. T. Crane of Chicago: Utility of all Kinds of Higher Schooling for Young Men who have to earn their own Living. Pub. by the author; 1910, 331 p.

as Rumbold says, were started by wholesale tradesmen, both for sons of the higher classes and for poor youths, for whom scholarships were decreed. As, however, ninety-five per cent of the business here consisted in small dealings, the schools did not provide for the bulk of trade requirements. The foundations were really laid in Prague in 1856, Vienna in 1857, Kratz in 1854, while in 1888 the Ministry of Public Instruction granted subventions to commercial schools founded by guilds, corporations, and chambers of commerce.¹ Of some sixty commercial high schools in the German Empire, with nearly 6,000 pupils, the support is varied or divided among cities, guilds, states, while many courses in *Reale* schools exist. It was a great step when for the better class of these schools the government allowed the one year military service. The Public Commercial Institute at Leipzig, one of the best and oldest, originated in the Merchants' Guild in 1497, which in 1868 became a general society under the Chamber of Commerce. It gives general and special training to apprentices, and also scientific training for commerce. Merchants send their sons here. Theory is rather prominent on the view that it makes the young learn more from experience, and teaches them to act with energy and decision in new and difficult situations. It is owing to schools of this kind that Germany has steadily diminished the many disadvantages of her position, and that even the trade of England in its details is, to an increasing extent, passing into the hands of those trained in Germany who have settled in London. The highest institution in this field in Germany, called the Commercial University, was established at Leipzig in April, 1898, by business men under the Chamber of Commerce, and with the approval of the Minister of the Interior and of the Academic Senate, and has already done a great service in teaching the dignity of business as a vocation. It is under twelve men representing various bodies. It admits chiefly graduates from *Reale* schools and *Gymnasias*. Only by special permission can a student here devote a portion of his time to work in the university. There is a seminary department for training commercial school-teachers, with a two years' course.

The first institution of this kind in Austria was opened in 1770, but had a checkered and unsuccessful career. In 1856 the Chamber of Trade and Commerce established a general mercantile institute at Vienna. Here the pupils regularly visit public collections, establishments, and are sent even to the great commercial centers of the East. Tuition is high and it includes law, products, life insurance, electricity, traffic, monopolies, traveling fellowships, etc. This Vienna Commercial Academy has the largest attendance of any

¹ See Schmitt, H.: Die kaufmännische Fortbildungs-Schulen Berlins. Sieglismund, Berlin, 1891. Also F. Glasser: Das kommerzielle Bildungs-Wesen in Oesterreich. Also Lante: École d'Commerce, Oudat. The Duty of the Merchant. Devinc: Commercial Practice and Basis of Law. Guilmalt: Industrial Economy.

school of its kind in Germany or France, with twenty-three professors in all.

The Commercial Academy of Prague opened in 1850 in the Polytechnic Institute, Bohemia being a land of many trades. Its policy is to receive boys before apprenticeship rather than after experience. It has a good library, collection of products, coins, natural history museum, etc., and teaches French, German, English, Italian, and Spanish correspondence. The Vienna Export Academy, founded in 1898, has weekly conferences under the chairmanship of the Minister of Commerce, to whom the teachers make weekly reports. It trains clerks for exporting firms, it being very hard for an Austrian exporter to find markets. Its members visit typical export establishments under guidance, often at distant places, and use the Royal Commercial Museum with its maps, trade collections, etc. The discipline is strict, and unexcused absence for eight days brings expulsion.

The German press has discussed at great length the reorganization of the consular service, since it is no longer an agricultural state alone, but has colonies. The old system, represented by trained lawyers and diplomats without personal acquaintance with commercial values and mercantile usages, was inadequate. It is proposed to assign trained *attachés* to each important consulate, to abolish permanent consuls, and put in their places experienced merchants who will give the office a distinctly commercial character and leave to the *attachés* the legal and purely official duties now put upon the chief. This latter work must be a life career, for which the best are selected by competitive examination. The world will be divided into four or five districts, for each of which the pupil will be educated according to his choice—e.g., China, Japan, the East Indies, South America, the United States, etc. Each prepares for and is assigned to one of these fields, and plans to spend his life there. Hitherto the world has constituted but one district. An officer who began at Peking might be transferred to Buenos Ayres, later to Odessa, and then to Palermo, in each of which he would lose the use of languages and the acquaintance with persons and conditions. This scheme would make consuls like subsidized steamer lines for pushing German trade throughout the world. Officialism will be sacrificed to pure utility.¹

The beginning of commercial education in Japan was a private business school in 1875 at Tokyo. There are now twenty-seven public commercial schools turning out some three hundred well-trained men yearly. These are higher, ordinary, and elementary. The first is represented only by the higher commercial college organized in 1885 somewhat after the plan of that at Antwerp, although lately raised to a higher grade. The government sends the best of these students abroad, perhaps six at a time, to different countries, for studying different lines of work. Attached to it is a college

* ¹ Mason, F. H.: U. S. Con. Reports, 1888-89, v. 2, p. 1438.

of foreign languages—Chinese, Korean, Russian, French, English, Spanish, and German. The faculty numbers nearly a score. The idea throughout is practical. Interpreters are trained. Teachers act as judges and pupils as plaintiffs and defendants. Western business ways are practiced—e. g., a bank is in one corner, a side room is a customs house, with clerks running to and fro with bills of lading, getting them accepted, selling to brokers. Commercial morality is a prominent topic here, including an outline of modern ethical science, the nature of ethics in business, the mode of forming virtuous habits in trade. No other commercial school has such a department, and it has been much criticised, and in a land of so many faiths it could not rest upon religion; but the effort is to make headway against sharp bargaining that seeks to get wealth from all purchasers by every method tolerated by an imperfect law. "No fog ever baffled a sailor more completely than the dual code of morality, the outgrowth of a degenerate mercantile system that has blinded and misled the people all over the world. The true standard of business dealing has been hidden and needs to be brought to light." Physical training is emphasized, for all must serve at least one year in the army after graduation, two years being deducted. There are two departments—domestic and foreign. The students form corporations. One delegate from this school, Zensaku Sane,¹ writes disparagingly of some of our business college professors, finding one who did not know the meaning of common phrases. This is a school for consuls. In the Commercial Museum each article has a ticket stating its origin, price, etc. These schools have helped Japanese commerce, although still in its infancy, to realize that trade "is the war of peace," and that its soldiers require efficient training.

Austin Lee points out that in 1889 only about 2,000 students in France received commercial instruction, although about 400,000 youth each year entered on a business career. The next year, in 1890, the certificate of graduation from the best commercial schools in France entitled pupils to a reduction of the term of military service from three years to one, provided they attained an average mark of sixty-five per cent. This brought at once new life into these institutions. Higher commercial instruction in France may be said to have begun with the plan of two merchants in 1820, who established *L'École Supérieure de Commerce*, founded on an idea the practical value of which was long discussed. It passed through a long period of groping and frequent change, almost ruin, and only since 1869 has it had a continuous existence unbroken by crisis or calamity. It receives resident and day pupils, who must be at least fifteen, and receives them on the basis of examination, from which, however, graduates of the *Lycée* with the baccalaureate degree are

¹ Commercial Education in Japan. Great Britain. Special Reports on Educational Subjects. 1902, v. 8, pp. 555-567.

exempt. There are many examinations, grades, types of diploma, with models and rewards, and the usual minute prescriptions by the government. This school has served as a model for others, not only in France, but elsewhere. Stress is laid on the motto "*Commerce oblige*," and upon honesty, initiative, perseverance, rather than on routine clerical qualities. A quarterly bulletin issues interesting papers upon social as well as economic subjects. Commerce is hard to teach. The Chamber of Commerce bought this school in 1869, and in 1876 offered traveling scholarships to those who had written the best reports upon the factories, mines, etc., they had visited, entitling the holder to spend the summer in other countries investigating questions suggested by the Chamber. In 1890 six others like it were established. Foreigners are admitted if there are vacancies. The course covers a wide range of topics, and the final mark is based not upon the answers given on fixed days, but it is sought to thwart the clever devices of crammers who violate the laws of education. The law specifies five excuses only which can be accepted. In 1898 it moved to better quarters, and has a fine museum, laboratory, dining room, and sanatorium. *L'École des Hautes Études Commerciales* is very slightly higher, and since 1894 has had a normal section for the training of commercial teachers. Candidates must be at least twenty, and day pupils are admitted. These schools suffer because of the social ambitions of students, which have caused France to be overrun with a learned proletariat pursuing ambitions they have little chance to satisfy, while the strife still rages between the technical and purely educational ideals. The Commercial Institute in Wagram Avenue, founded in 1884, specializes on the export trade. There are also five schools of a similar type in cities outside Paris, while there are three primary schools of commerce in Paris and one in the Provinces. Those at Lyon, Marseilles, and Havre are controlled by private corporations. These higher institutions have very comprehensive courses. They teach customs, banking, exchange, insurance, syndicates, interest, discount, commerce, monetary systems, modes of bookkeeping, inventories, various types of merchandise, combustibles, vegetable, animal, and mineral products, testing, analysis, civil, industrial, and marine law of various countries, brokers' agents, commissions, bonders, invoices, quittances, receipts, card samples, inland and seaport markets, letters of credit, clearing houses, bills of lading, many kinds of bookkeeping, warehouses, savings, loans, premiums, middlemen, commissions, international weights, measures and money, stocks, bonds, daily quotations, consuls, annuities, lotteries, tret, wear and tear, pensions, with a great deal about materials and the chemistry and physics applied to them, such as fertilizers, resins, amber, rubber, oils, building material, quarrying, tiles, modes of paving, plasters, forestry, with considerable attention each to iron, steel, brass, zinc, tin, silver, gold, bismuth, lead, mercury, platinum, alloys, glass, horn, shell, ivory, glues, feathers, hair, bristles, silk, wool, flax, jute, cotton spin-

ning, textiles, spools, threads, draperies, sugar, drinks, chalks, soaps, milk, tea, coffee, races, religion, climates, etc. Considerable stress is laid on the history of commerce from the Phoenicians down, the great mediæval highways by land and sea, fairs, effects of wars, and of the discoveries of the new world, commercial basis of the greatness of Italy and Flanders, commercial bubbles, inflations, blockades, *Zollvereins*, commercial treaties, panics, merchant marine, Suez Canal, colonies, chambers of commerce, consuls, rights of domicile, marriage, wills, franchises, mortgages, competency of minors, married women, power of attorney, indorsements, privateers, abandonment of ships, trade-marks, labels, counterfeiting, slavery, serfdom, absenteeism, pauperism, budgets, proportionate, progressive, land, stamp and surtaxes, duties, custom houses, frontiers, telegraphs, telephones, elevators, jetties, floating docks, tide ports. There were, however, still in France, in 1900, 103 chambers of commerce that had done nothing in this line.

One of the oldest and most famous European colleges of commerce was founded at Antwerp half a century ago to enable bright young men to advance rapidly. The regular pupils, as opposed to free pupils, obtain a diploma in two years. Each may choose a foreign language he desires to be competent to correspond in, Russian included. Traveling scholars make reports, often utilized by the government. Arthur Herbart reports that in Sweden commercial education is entirely private, the state aiding three schools, while in Norway C. Dundus describes two classes, private and municipal, the best being at Christiania, which is open to both sexes. In Switzerland B. C. Lowther describes more than a score of such schools, in which there is much local diversity. Some of them are gratuitous under the government, some coeducational; some aid their graduates to find employment. In all, business firms are visited, and there are samples of merchandise and libraries. A. Peel reports twenty-two commercial schools. In Italy, Mr. Alban Young describes the Royal Higher School of Commerce, at Venice, founded in 1868, with a special consular course of five years. Another was established at Bari in 1873, with a model office to train for business and for consulates. Raikes, in a report presented to Parliament in February, 1909, describes twelve such schools in Belgium. In 1887 the state universities were empowered to give the degree of Superior Licentiate of Commercial and Consular Science. Most of these schools are due to private enterprise. In Denmark there are several schools, the chief being at Copenhagen, which has had a checkered history for nearly a hundred years. Here, however, there is no curtailment of military service, and the students are not held, but drop off into offices as soon as possible. These are not trade schools, but schools of trade.

There is no institution in Great Britain that can fairly be called a commercial high school, although there is just now a movement in this direction. To this lack may be attributed the growing dis-

placement of English youth in the great business houses of London by Frenchmen, Germans, and Italians. Instead of beginning this work by teaching, London did so in a characteristic English way by establishing examinations, granting commercial certificates to all who could pass; but it was soon found that there were no properly qualified teachers, so that this work has not been successful.

If skilled labor requires the most specialized, commerce and trade require probably the most general of all kinds of education. He who would buy cheapest and sell dearest must have some knowledge of the markets of the world, or at least of those parts not walled from him by a prohibitive tariff. He must know raw materials, and these are a vast number, must know something of all the chief processes by which finished commodities are prepared, how things are put up, how to find buyers, where to ship, etc. If our selling agencies are perhaps overefficient for our home markets, as shown above, they are not sufficiently so to cope with our competitors in other lands in selling abroad, so that we are relatively outstripped in foreign markets, notably just now in South America, for trade knows no Monroe Doctrine. Of all the stupendous new problems now opening to the newer and greater education of the future, none exceeds in magnitude and intricacy the question whether we *can* educate for business in this sense. England, the chief of modern commercial powers, in many respects, is only at this moment beginning to attempt it, and of most of the few score great captains of industry who control the business of the country there are but few who yet believe that any course of business training that is possible would have helped them much in their work. They hold that to learn it one must plunge in early in life, and that no royal road to success could be laid out. They have no ability and no wish to impart to others the real secrets of their achievements, unless in platitudinous counsels to the young to be good, temperate, to save, work hard, etc. Moreover, if they could and would write an autobiography *intime*, the shifts and devices by which they formulated and solved their own critical and original problems would not always be edifying or even ethical, while conditions are also changing so fast that anyone who copied them would be left behind. Again, while teacher and class can visit factories, trade is not

capable of being so well demonstrated object-lessonwise, for its operations only center in offices, but they can be studied only where markets are. Retailers, too, would hardly be disposed to open all the conditions upon which their profits depend. To know a business seems to demand apprenticeship to it. If Carnegie, Rockefeller, Morgan, Hill, and others would each give a course of lectures in some of the new college schools of commerce or business, each of which should be a heart-to-heart talk to advanced and select students, with no reporters admitted, and each be confined to his own special line of endeavor, describe frankly his chief problems and just how his great *coups* were made and tell of his private methods and secret rules, then we should have indeed a new fashion set in education and new vital currents open from the office of the great trust to the college. I wonder if something like this will not one day be a demand laid upon those who have been prosperous! It might be regarded as a higher type of charity, establishing a new and personal bond between successful senescents and aspiring adolescents. To give a vast fortune wisely is said to be even harder than to acquire it. It is a splendid new instinct of old age unknown to Cicero, who described old age in such inspiring terms. The passion of these youth who long, above all things, to get rich honorably is like every other interest, capable of vast service for pedagogy if it can be turned on. Probably with most of the ablest young Americans this is the very strongest of all their desires, for which they would do and sacrifice more than for anything else. Now, this zest largely runs to waste pedagogically. It is at least an appetite that is fed on very scanty and ill-adapted food. More than by rendering financial aid, these great leaders could help young men who most of all desire to follow in their footsteps, by letting them hear from their own lips how they proceeded, where and why they failed in this point and won in that, something of what they regret as well as what they approve in their own careers. Confessions of this sort are supremely good for the souls both of those who make and for those who hear them, especially those who have no children or have more wealth than they wish them to have, and so give to others or accept a kind of foster parenthood toward the sons of others. Young, élite

aspirants for wealth have a prodigious appetite for what these men could tell, and would listen to them as to no others. To feed them with this wisdom of experience would be the culmination of the higher parenthood and give the quickening touch between old and young, between the frontier and the acolyte, and it is precisely this that our country now so dangerously and unprecedentedly lacks, as I have shown elsewhere. Should not retirement from business, along with its exemptions and immunities, bring some new duties? Should not the reminiscent instincts of age be indulged by making accessible, at least in dictated autobiographies, even though they be reserved from publication for a century, the calm and final review and self-critique of these most characteristically American lives? Is this not a part of the art of large giving, and why should the world lose with their death such additions as this would make to its stock of experience? Teaching is surely a sacred duty of all those who have wisdom that the world wants, and why should what they know die with them when it is so craved?

Wanting this, every local teacher of commercial education should enlist every business man of ability and public spirit in the community to talk to students on the lights and shadows of his own trade. Here lies a great storehouse of true and hard-won knowledge that has often cost a lifetime of labor and involved as much intellectual work as the original researches and discoveries of science. And why should each generation begin at the beginning or be taught by the method of hints or random giving of points when each ought to improve the race by consecrating to it all that is best in it? If experts, or even corner-makers in wool, cotton, pork, lumber, leather, wheat, corn, railroad and other stocks and bonds, would talk and answer questions teachers could put them for the benefit of their pupils, a current of vital interest would pass between them. If every method and device that succeeds is bound up in secrecy, then pedagogy in this field may well despair. We teachers acquire a passion for knowledge all men do not have and for imparting the best and latest we know, and so it is hard for us to understand those who make their profits by the suppression of this teaching instinct which seems to us innate and inherited, integral even to the parental

impulse and to "big-brother" and other similar movements. Nowhere else are so many of the teachers those who have tried and failed in the practice of what they teach or who could not succeed in their specialty if they tried.

Again, if not this, or in addition to it, text-books, also a new kind, are here, too, wanting, as indeed are often those of any kind. How can commerce in an inland or rural high school or college be rightly taught except in an empty, formal way and invested with only the ghastly semblance of reality by the platitudinous and effete philosophy of general culture, which is now only the last resort and excuse of the devitalized attitude of the dead teacher who, in thus seeking to excuse, really accuses himself? Excursions, pedagogical journeys with a carefully prepared curriculum or itinerary of business houses, are indispensable, even if certain clerks have to be trained, paid, and set apart to show and tell. We should put it up to mercantile citizens who criticise the products of the school to let it annex them in the sense of coöperating to provide for half days of pedagogic visitations by relays of classes. Let us say to them, Be a father and teacher for a few hours to these young pupils; demonstrate, instruct, inform, show them over your establishment; prepare for this work a little in advance to insure them the greatest profit from it; contribute something to make the school life vital and to rescue it from artificiality and isolation. Dismiss as hopelessly unfit and afraid of his work the teacher who hints that this sort of thing would interfere with the regular studies, for the best curriculum is only "a thing of shreds and patches" compared with these things. Make the commercial school peripatetic, put it on wheels if only to render your own brain wheelless, teach the geography of where things come from and go to that are in your town. In English, teach the vocabulary of business terms; know the local history as made by business; read the news of the day as it affects sales, purchases, prices; catch every good drummer, by day or evening, and make him talk of the things nearest his heart for an hour to the class, question and send him out with a new sense of his usefulness; exchange local studies of your school with those of others elsewhere; keep in touch with the board of trade, the town or city officers; collect trade journals; keep

up to date and realize that, whatever other schools may do, those of this type can never remain stationary. Thus these courses might be made less anæmic. Here we are teaching very poorly what as a nation we do best. We are training understrappers who fit and fill subordinate places and grow content in them and lack the power to rise. What great business man was ever trained in any of our commercial schools? In agriculture it is a crime to conceal, and a duty to impart, all its latest, highest, and best knowledge to all the people. Nothing can be patented or even hidden. Manufacture has more and high finance and trusts have most esoteric wisdom sequestered from schools.

Education for the Farm.—This, to be successful, must forever bottom on love of animals, flowers, plants, trees, fields, water, and nature generally. (As set forth in Chapter XII of my "Adolescence.") From this love arose first, and are still fed also science, art, literature, and religion. We are hearing again the call of the wild back to the land, the country, rural life, natural and economic, as contrasted with technical and scholastic nature study. On this sentiment rests not only agriculture, but forestry and all kinds of animal culture, bees, insects, pests, wild birds, barnyard fowl, fish, game, etc., all observed with the natural eye, alive and in their own habitat, rather than dead and studied by sections through a microscope. This work needs women no less than men, is for children and adults, the academic and the unschooled alike. It points to the simple life. It is to-day further along and better provided for by way of teachers, apparatus for practical work, literature, texts, higher institutions than any or all the other lines of industrial training, and has far more governmental and private agencies and a stronger public sentiment behind it. Here, too, we have less to learn from Europe and more to teach her. The town and city have long drawn off the best youth and maidens, and will long continue to do so, but rural is now beginning to assert its charms and claims again against urban life as never before; the country is coming into the city and rapid transportation is greatly extending suburban life and giving it new rural traits. The rich are leading a new hegira to the fields and recreating abandoned farms. New journals, books, and articles are ex-

pressing and aiding not only the summer but the winter joys in the open. Our decadent rural schools are being reorganized and educators have been taught a wholesome sense of dissatisfaction with the stuffy old education of books.

On the basis of this broader movement have grown the now nearly 100,000 *school gardens* in the United States,¹ the brief history of which goes back barely ten years and seems a new fairy tale of pedagogy. These gardens are of all kinds, sizes, shapes, in all sorts of places, under every kind of control, with few or many facilities, so that something in this line can be done almost everywhere. Sometimes the hard earth or brick or other pavement of the schoolyard is taken up to make room for them, soil is carted on if necessary, wastes are watered, marshes drained and reclaimed from wilderness, vacant lots loaned, rented, or sometimes bought near by, or perhaps at some distance from the school, so that there is no longer any excuse for untilled ground near a school, the hygienic conditions of which are thus often improved. There are long lists of flowers, vines, nursery, shade, and ornamental shrubs, trees and hedgerows, almost every kitchen vegetable that will grow, often corn and grain are raised. Beets, lettuce, parsnips, carrots, peas, sweet and pop corn, cabbages, cauliflower, pumpkins, squashes, cucumbers, melons, radishes and the rest are planted and tended by boys and girls who often spade up the ground, water plants in drought by many a device. There are tools, tool houses, exhibits of produce and prizes. The crops are perhaps taken home, used on the family table, given or sold to parents or the markets, exchanged or bartered to those who can tend them to the end through the long vacation. Children are taught about several score of weeds, insects, pests, and how to deal with them. They read or are told the content of many a special leaflet by the government or the state agricultural college, both

¹ See as good guides and finders to the voluminous literature here, first the work of two of my Clark colleagues, viz., C. F. Hodge, *Nature Study and Life*, Boston, Ginn & Co., 1902. 514 p. And R. J. Jewell, *Agricultural Education*, U. S. Bureau of Education Bulletin, No. 2, 1907. 140 p. See also, H. W. Foght, *The American Rural School*, New York, The Macmillan Co., 1910. 361 p. M. L. Greene, *Among School Gardens*, Russell Sage Foundation, N. Y., Charities Publication Committee, 1910. 388 p. H. G. Parsons, *Children's Gardens for Pleasure, Health, and Education*, N. Y., Sturgis & Walton Co., 1910. 226 p.

of which are now doing so much for children. They are given seeds in great profusion, or sold them in penny packages, with printed directions. Very many kinds of flowers are raised and taken home, sold, worn, used to decorate the schoolroom, sent to hospitals or invalids, funerals, etc. The children profit by many a lesson on the botany of roots, chemistry of moisture and air, fertilization, all with the aid of special texts, books, and charts. They work out the elementary geometry of plotting their individual and also their common beds; they study the arithmetic of cost and profit; often come early or stay after school to work, spend some of their time through recess. Elsewhere, a good part of two or even three afternoons a week of school time is given them to keep up their plot. Some persist into and a few even through the summer. Children are sometimes marked for neatness, system, productivity, are taught the care and use of tools, how to plant. Interest often spreads to the home and to the window pots, and flowers in the front and vegetables in the back yard are often cultivated, while farm boys bring home not only interest but often valuable information that the father applies to his profit. In 1900 Dr. Robertson distributed \$100 in prizes for the best heads of oat and wheat from the father's farm. This promised so well that Sir W. C. McDonald offered \$10,000 in small prizes for three years, open to all Canada. While some 1,500 boys began, 450 completed the competition at the end of three years. Each must hand-pick enough of the best heads to seed a quarter of an acre. As a result of this three years' work, the average increase in spring wheat was found to be eighteen per cent on the number of grains and twenty-eight per cent in weight, while with the oats the increase was nineteen per cent in the number of grains and twenty-eight per cent in weight. This showed what the school could do. Then came the famous McDonald School at Guelph, for the training of teachers in this department was really half of the whole problem.

The principle that every rural school should have a garden, so that there shall be a continuous chain of them over the country, now seems likely to be literally realized. Gardens keep children in school longer than they would otherwise stay, give a wholesome union of motor and intellectual training

by wedding the hand and the head, strengthen the body, improve the health by exercise out of doors, make headway against tuberculosis, establish a new and vital bond between the home and the school, make farm life attractive, interest boys in the agricultural college and spur some to enter it. They have increased tenfold the number of home gardens (Cleveland had 50,000 due to the school), given new life to the school in cities that were a little in danger of falling behind (like Philadelphia, one of the leaders in this movement, New York being well in the rear of it). They have called into life many local and some large auxiliary associations and societies. These gardens are sometimes made social centers. They certainly tend to keep the child off the street and from idle and vicious associates. They coöperate with the parks, playgrounds, village improvement clubs, boards of health, and sometimes boards of trade. They enlist janitors. Some of them employ expensive experts. They bring a spirit of rivalry, prompt exchanges with other schools, sometimes give interest in landscape gardening and forestry, in soil fertility, and distinctly help agriculture, the oldest of the arts and the newest of the sciences. They motivate excursions, make for docility, order, system, perseverance, punctuality, put life into elementary mathematics, furnish material for compositions, touch up geography, give zest to elementary botany and zoölogy, find moral lessons in weeds as enemies, influence reading, are full of silent values for citizenship, prompt charity to the poor, the sick, cripples; teach color schemes and strengthen the æsthetic sense, widen the vocabulary, connect with and enlarge domestic life, give a wholesome sense of ownership, provoke the young to win and the old to give prizes, teach habits of regular and sustained industry, make troublesome boys tractable, exclude baser thoughts, qualify and incline the young to later care better for children for having learned to care for plants. They relieve the drudgery of class work, make the mind grow with the plants. They inspire vocational purpose, interest in industrial history, teach respect for property, vitalize Arbor Day, are closely associated with patriotism and the flag, give a little spending money, teach kindness to animals, are particularly beneficent for young and criminals, are religious because they point the way from nature to its Au-

thor. Thus, in fine, they help us nearer to God and to the almighty dollar.

All these claims and more are now made. I doubt if any educational movement in history has ever spread so rapidly and with such enthusiasm or if so much was ever claimed for anything else ever taught. Garden is indeed a mystic word, suggestive of paradise, beauty, and joy. The pleasure with which we contemplate this has its roots doubtless deep down in the psychogenetic strata which represent the dawn of domestication and cibicultural life. The pulse of springtide throbs through all this pedagogic renaissance. After the city interlude of only a few generations, the heart of man reverts to the great All-mother, Nature. The soil smells good again after the school smells, and we feel the benediction of the broad fields and blue sky sinking into our very souls. Childhood, especially, belongs out of doors and in the country, has been led captive and is now beginning to come home from its captivity. The spirit of life, especially in the spring and summer, draws us all into the open to rest and regenerate our frayed and shopworn souls. This movement preludes a general jail delivery of the child too long imprisoned in classrooms. It is high time that we thought of it. The garden is the lungs of the school, is a boon to the health of teachers, throws the strain from the nervous system and the tiny accessory muscles that make for accuracy to the larger, older fundamental muscles of the back, thighs, and shoulders that dig, pick, shovel, rake, and lift; teaches the significance of rain, heat, cold, the winter, sunshine, the meaning of leaves, grass, and blossoms in nature and in art for ornament; lifts the burden of examinations by shifting the stress from knowing to doing, from methods to products.

A weak point in all this is the eight to twelve weeks' vacation. Many, if not most, of these youthful gardeners never gather or even see the fruit of their labors. Some, of course, are in at the harvesting, but many sell, give, or barter the fruit of their labors or desert before it comes. Some work on a while at irregular intervals, but we have no statistics as to the number of harvesters, for the movement is now at the stage when all praise and none criticise. I do not find any suggestion that the school should hold over during the hot

months and allow the farmers' natural vacation in the winter. During most of the school year gardening is impossible in the North, and I have seen many of them in a pitiful state in dog days. True, children can study books and theory and read when the world is snowbound, but to begin and not finish is not the ideal of education. Some fruit rots, some is stolen, some cared for by new recruits who did not sow or plant, and hothouses or winter gardens are a poor substitute. To cultivate only plants that mature in June would greatly limit the range of crops.

Again, garden work is for most children a halfway station between study and play, so that while in term time the alternative between it and the schoolroom gives them a delectable opportunity to escape its confinement, when the term closes and the option is between gardening and the freedom of vacation, the case is very different. Few children ever did or will prefer work to play. Again, novelty has its own charms, and these soon wear off and we hear many a tale of loss of zest after the tending, which is needful, becomes an old story and the necessity of keeping at it is fully felt. Once more, farmers' children often feel it irksome because they have had similar duties at home and do not care for a second apprenticeship. Moreover, there are some children who are really too delicate to keep their beds without help, and the system usually requires plots of equal size for boys and girls alike of the same grade, making no distinction between the weak and those strong enough to tend half a dozen beds. Thus, there are difficulties yet to be obviated and problems yet to be solved.

Despite the extraordinary development of agricultural education in the grammar grades below and its no less remarkable equipment in academic grades above, American high schools, as usual the strongholds of conservatism, have done little, and here, too, are the last to respond to the spirit of the age, although there are, of course, exceptions. A dozen state agricultural colleges maintain secondary schools and there are some for colored and Indian children. Several state legislatures have provided for such schools or courses and there are a number of private secondary schools where it is taught. Several hundred public high schools in the country

offer longer or shorter, inadequate and ineffective courses. Agricultural education always and everywhere tends to the consolidation of rural elementary schools and cannot be worked well when they remain isolated. Some state universities, notably Illinois, welcome young men of secondary or no grade to any or all of their scores of courses in this department. All rural high schools should at least stress the science on which agriculture depends, although few do so. Especially in the East, most of the smaller, weaker high schools which are rural spend most of their teaching force in fitting a very small remnant of their pupils for college. Moreover, competent teachers in these lines are as yet few, for the agricultural colleges have not yet trained them aright or in sufficient numbers. The chief obstacle here is, however, the inveterate prejudice and repugnance of teachers and the indifference and dislike of the soil by secondary pupils. Thus, the gardening enthusiasm of the grades instead of being developed is chilled as soon as the pupils approach the high school and must remain in cold storage till the next stage of training, if that ever comes. This means that the intellectual crop sown is too often unharvested. The American schoolboy is very sensitive to the stages above him at every step in his educational progress whether he is ever to pass on or not. Just as the college spirit works downward and pervades the high school, so does that of the latter pervade the grammar grades, so that the seventh and eighth, to say nothing of the sixth, begin sometimes to look upon gardening as a badge of their elementary grade and as something they will and want soon to outgrow and leave behind. There are also few or no suitable secondary text-books, and here we may well hold the academic biologist responsible for neglect or lack of insight. This is in sharp contrast with professors of classics, mathematics, and literature, who flood the mart for fitting schools with their texts. Applied biology should now play a tremendous rôle in the lives of all men and women calling themselves educated. But the secondary text-books that exist are so scholastic that the lessons of this great science are for the most part untaught, and entrance to what is given is barred to the laity who have not mastered the barbaric tongue of scientific terminology, and painstaking laboratory technic. Is there any-

thing that boys and girls in the four best teens more need to know than the practical lessons of biology, and is there any subject in the curriculum so unpedagogically taught?

Europe has had some of the same difficulties, France having done best on account of the subdivision of land and one adult in four there being a proprietor, while England has done least because primogeniture keeps so much of the land in so few hands. France has three excellent secondary schools of agriculture, each with a large teaching staff and a two years' course, including the culture of sheep, silkworm, wine, distilling and brewing, tending cattle, poultry, bees, etc. Students must all spend their vacation on listed or accepted farms and report, and must also make frequent excursions through the neighborhood. Holland has permanent winter schools. Germany has one in nearly every province, the grade of *Ober-Tertia* giving the pupils partial exemption from military service, which gives a great, if artificial, stimulus to these courses which we should call somewhat too scientific and theoretical. Reddie's Abbotsholme School in England insists on some practical farm work and instruction for all boys, but the movement has been bitterly opposed by the leaders of secondary education there.

It should not be forgotten that this is the age when the average boy, and still more the girl, is most averse to farm and even to country life. The social instincts are strong, and so is the love of excitement and getting together in groups, and these all incline to the town and city and away from the field and its isolation. The boy may not regard the farmer as a yokel or hayseed from way back, but his work and ways do not charm, while if the boy lives on a farm, he strains his tether most at this age to get away from it. Hence, if he enters agricultural courses connected with academic institutions, he finds himself socially discounted by his schoolmates, although real progress is being made in overcoming these tendencies, which will decline as these courses become thorough. Perhaps, indeed, the high-school hiatus with its period of circumnavigation is necessary here where it may be that only after a period of aversion and orientation, when serious purpose is matured, will the boy be ready to settle to a plan of rural life. If so, a most beneficent step is taken by those colleges who admit lads of all ages, without entrance tests to their courses, to a rich and varied dietary of short and long, special and general courses. They often give ~~give~~ secondary edu-

cation in agriculture to boys of college age, or even older, whether they have been to high school or graduated in other courses there, ignoring these.

It is doubtful if the future historian of education will find more brilliant pages than those describing the development of agricultural education in college and university grades in this country, with which nothing else in the world has anything to compare. It began, as all know, with the Morrill Bill of 1862 appropriating 30,000 acres of land for each member of Congress to establish colleges of "agricultural and mechanic arts," each state thus receiving all the way from 82,314 acres (Kansas) to 989,920 acres (New York). This represented a wide feeling that the old classical colleges were unsatisfactory. There was also a sentiment abroad at that time in the country that the applications of science, especially those of chemistry so brilliantly and lately made by Liebig, would prove of the utmost economic value, so that hope and expectation were perhaps somewhat excessive. Great railroad grants were being made by the Government and wide tracts were homesteaded or thrown open. Unfortunately, many of the states sold their educational land and the colleges they established were for the most part poor and mean. Some states, however, notably Michigan and New York, kept their land and profited greatly by their foresight. Over 1,000,000 acres of this land are still unsold and the sales altogether realized about \$12,000,000. Little good work, however, was done in this field for twenty-five years, for often only agricultural departments were added to existing institutions. After many local beginnings, however, came the Hatch Bill in 1887, which gave each state \$15,000 for an agricultural experiment station. Then came the second Morrill Bill of 1906. These, with their cumulative method and aided by later acts, have raised the total, so that in 1911, when the full benefits of all this legislation are operative, each state and territory will receive \$80,000 per year from the Federal Government for agricultural colleges and experiment stations. Of these there are now sixty-three, fifteen states having separate institutions for white and colored students. The states, too, are now voting generous additional sums, largely for buildings and equipments. There is a National Association of these colleges

which aims to make them equal in rank and entrance conditions to other first-class colleges, so that the bachelor's degree in the former shall have the same value as it has in the latter. Six of these institutions conduct secondary schools. They also hold long and short, summer, winter, correspondence, extension, and normal courses and conduct farmers' institutes all over the state. Some courses last only a week or ten days and admit boys. They teach forestry, dairying, stock judging, manuring, entomology, birds, foddering, poultry, grasses, floriculture, etc. No discovery in these stations can be patented, but all must be given out. Even the Babcock machine, used the world over and saving millions of dollars, profited the inventor nothing. (See Jewell.) Forty of these colleges offer graduate courses leading to the degree of A.M., and nine grant the Ph.D. Ohio opened a graduate summer school in 1902 with seventy-five students, but lacked funds to continue. In several states special organizations have been devised to spread at once to the farthest hamlet the discoveries made at the stations, where themes of immediate practical value have precedence over all others. More than a million farmers attend the institutes yearly held by the Federal Government. Several of these colleges have reading courses for farmers, and even for their wives, and ask and answer questions by mail. Since 1904, trains are sent out all over certain railroad systems, stopping at hundreds of stations, preaching, e. g., "the corn and grain gospel," distributing seed corn, of which formerly only some sixty-three per cent ripened. All this is free and has brought returns of inestimable value. Leaflets and bulletins are sent out by many state colleges and millions of them by the Agricultural Department at Washington. Some colleges guide the work of elementary schools and conduct summer courses for these teachers. Thus, the contact between the pioneers of the frontier engaged in research and those who can profit by the results of their labor is close, immediate, vital. This brings into the foreground a new ideal which well comports with the American spirit and is far-reaching and pervasive, if subtle, in its influence upon our educational ideals.

Agricultural education is a great advantage in that it is recapitulatory. Every civilization was "dug out of the

ground" and man has been a farmer ever since he began to domesticate plants or animals. To go back to old phyletic traits is always a joy and an inspiration. Perhaps the very best of this work is that it often makes the old fairly yearn with the wish that they might be young again and begin over. Children here, too, often teach the teacher, to the great gain of both. Again, the practical products of scientific agriculture are immense. We have copious statistics in this line. By the best methods and more intensive farming the output of many products could be doubled and some of them easily quadrupled. Despite all this provision, knowledge does sift down rather slowly from the laboratory to the laborer, who still often has to be taught his own interests by agencies that force useful knowledge upon him. The social status of farming has been greatly elevated by this educational movement, and a back track from the city to the country may help solve the gravest of all the farmers' problems, viz., that of sufficient labor. The gardeners of Germany have lately protested that their art as now taught in the schools is making so many people, rich and poor, sick and well, make gardens that their markets are impaired. The negro problem throughout the Black Belt, where trade unions exclude colored workmen and where the latter have lost the rice industry and are the victims of many sharpers, is solvable only by an agricultural education that shall make them independent on their own farmlets. Indeed, our political institutions were devised for yeomen in small communities or, in a word, for intelligent farmers of the colonial type who learned self-government in the town meeting. Many of our political and social evils, the cancer of corruption and graft, are mainly due to urbanization, which made conditions which the framers of our institutions never contemplated, and could be checked only by a "rural reflux." We are now striving to reproduce, though on a higher plane and better informed with science, the old farm life which I knew as a boy,¹ and which made perhaps the best educational environment ever devised for adolescent lads. The danger of alienation from the farm by collegiate agricultural study is

¹ Hall, G. Stanley: *Boy Life in a Massachusetts Town Forty Years Ago*. *Ped. Sem.*, June, 1906, v. 13, p. 192-207.

ever present and is subtle. It just now inclines many youth not especially fit by intellectual gifts or by training for it to seek a career in experiment stations, or makes them traveling salesmen of tools and labor-saving devices, or quasi-experts who would really have done better on the land. So inveterate is the prejudice that withholds a man with an academic degree from stated labor with his hands, that far too large a proportion of those who once enter an agricultural college do in fact bid a final farewell to the old place. We lack too greatly comprehensive statistics showing just what becomes of these bachelors in agriculture. The call for teachers does something to deplete the farm. Again, we must know the effects of the new agriculture, if any, upon the size of families and the general increase of the farming population. Dearth of workmen is to a considerable extent dearth of children of farmers. The city is, of course, the great sterilizer. So was the old New England farm. Shall we improve and increase the human stock here as we do cattle? This is the ultimate question by which the final value of everything is to be tested. Does every nation need a stratum of its population that shall gravitate toward static peasant conditions, and is this rather constant and intensive cultivation of the farmers' brain cutting off our source of supply of men and women from the future and helping toward race suicide in just the class from which in the past so many of our greatest leaders have sprung?

Here we must note another defect of agricultural schools. They give most of their education to field culture and too little to animal culture. Flocks, herds, poultry are, of course, studied in a practical way, but this work should receive every attention. Breeds of every kind of animals, the effects of crossing and care and pedigrees, have been relatively neglected, as corn was ten years ago, although the same attention would yield a no less manifold gain. The winter neglect of cattle on Western farms alone brings enormous losses, while foddering and fattening and yet more attention to the breeding of all domestic species would not only pay, but the serious study of all the essential aspects of animal culture would not fail to bring home some practical lesson for human eugenics.

We need, e. g., a good book each on the horse, cow, hog, sheep, and all the rest of a kind not unlike the Walter Page Series of Undomesticated Animals published during the last decade.¹ Still none of these are quite right. The horse book, e. g., should be copiously illustrated, and should tell in plain language the paleontological history of the horse, which is a classic paradigm of evolution because better known all the way than any other from the rabbit-sized eohippus up, which should describe what is known of the domestication of the horse, characterize its relations to different races, like the Arabs and Patagonians who live on and with it, its habits and training from the ancient mediæval knights among whom horse education perhaps reached its apex; should have something about equine culture history, the myths about the horse and its place in fable, with a touch, but not too much, of the Black Beauty kindness; should describe horse stock farms, care and training; should show distribution with maps and statistics of population, race, plow, war horses, directions how to make horse farming profitable, and a good chapter epitomizing the now very interesting literature on the instincts or intelligence of the horse. We need on similar lines a dog book following all these rubrics and utilizing the pedagogic suggestions contained in such studies as Bucke;² also a cat book utilizing Browne.³ These manuals should all draw abundantly upon the studies in the field of comparative psychology all the way from those of the natural historians who follow and photograph animal life afield to those who experiment upon it under the controlled conditions of the laboratory, for animal behavior is a mine of pedagogy which education has not yet learned to utilize. Here let me add parenthetically how much the world, too, needs a good monkey book, and lion, tiger, bear, wolf, fox book, etc. The spirit of these books should be that of S. C. Schmucker.⁴ Nothing can exceed the charm of such books, if only adapted to children's interests. Although we have several texts in economic zoölogy,⁵ none has yet been written that fits the nature and needs of children and

¹ See Ditmars, R. L.: The Reptile Book, 1907. 472 p. Dickerson, M. C.: The Frog Book, 1906. 300 cuts, 253 p. Jordan, D. S., and B. W. Evermann: American Food and Game Fishes, 1902. 400 cuts, 573 p. Holland, J. W.: The Moth Book, 1903. 479 p. Howard, L. O.: The Insect Book, 1902. 429 p. Holland, W. J.: The Butterfly Book, 1902. 382 p. Sutherland, H.: Book of Bugs, 1902. 223 p. Blanchan, N.: Bird Neighbors, 1897. 234 p.

² Bucke, W. Fowler: Cyno-psychoses; Children's Thoughts, Reactions, and Feelings Toward Pet Dogs. Ped. Sem., Dec., 1903, v. 10, pp. 459-513.

³ Browne, Charles E., and Hall, G. S.: The Cat and the Child. Ped. Sem., March, 1904, v. 11, pp. 3-29.

⁴ Schmucker, S. C.: The Study of Nature, Phila., Lippincott, 1909. 315 p. And F. C. Hodge's forthcoming Civic Biology.

⁵ Osborn, Herbert: Economic Zoölogy, New York, The Macmillan Co., 1908. 490 p.

youth. In agriculture we have W. C. Edgar's "Study of a Grain of Wheat," which is suggestive, extending as it does from botany to the flour mills, wheat pits, markets, etc.

Technical scientific biology should wait till college, for as now served up in high-school text-books it is the chief enemy of spontaneous interest in natural history. The animals and plants chosen should be: (a) those nearest and best known, (b) those of chief economic interest as touching human life most intimately, and (c) those whose habits and instincts are most significant for the child. The place of forms of life in a system of classification, or even in the evolutionary order, has little interest and violates the above pedagogic categories. Hence, its place should be later. We should use the house fly, potato bug, spider, caterpillar, ant, bee, mosquito, wasp, butterfly, snail, earthworm, hookworm, gypsy and coddling moth, toad, frog, rat, mouse, snake, fish, woodchuck, squirrel, coon, etc. These are fit and proper themes. In a word, agricultural education should, up to college at least, keep in the closest touch with nature study. Thus, children often teach teachers, make real contributions to science if rightly directed. A girl of eight, e. g., found out how many slugs a pair of bobwhites would eat in a day, from which data her father computed that this species could save the country many hundred thousand dollars annually. Children can help us discover what birds should be protected and kept from extermination and what should be outlawed. With their aid it was estimated that in Nebraska there were 40,000,000 pairs of birds consuming about 50,000 bushels of insects daily to feed themselves and their young. Nature is a complex system of exquisitely balanced forces, and when one species becomes ascendant or descendant, many if not all others, at least in its vicinity, are profoundly affected. Man is only one member of this system, and it now depends upon his hygienic acumen whether he will evolve into a creature vastly superior to or lapse to one inferior to what he now is. Whether a century hence the population of this land shall number one and a quarter billion people, as it will if the present rate of increase keeps up, or shall approximate a stationary condition; whether the effectiveness for work, culture, morals is augmented or de-

creates is to-day for the most part a question of dynamic biology, for we must not forget that family and church, state and school have their biological bases. Can we keep down pests and pestilences, weeds and bacteria? Can we teach vital things and not those that make life a burden to the children, and that it is a relief to them to forget? Our very statesmanship from many points of view is resolving itself into practical biology, and this in its last analysis is chiefly significant as an introduction to eugenics. The best lesson we can learn from all this is to improve the quality of parenthood and substitute wherever possible *vires* or real men for mere *homines* or human beings, whether we can keep down the human weeds and vermin and advance the best stirps and families.

Science must have its technic of methods, formulæ, terms, and its representatives must always talk to each other in what seems to laymen jargon. It has been said that professors in some fields command a larger vocabulary of technical terms than they do of words that all can comprehend. No doubt there is, too, in some a burrowing tendency or ink-fish instinct to hide oneself in a cloud of mystifying language. But one test of a real teacher is the ability to strip off all these academic vestures and stand forth as a humanist and talk in the tongue of the people and to them, and tell the unschooled and even the unlettered the best things they know and work for, and thus contribute something to enrich the life of the average man. This inclination should be strong in a republic, where majorities and public sentiment rule. Chiefly, however, this demand should be felt and respected in those sciences that deal with the supremely practical problems of life, health, reproduction, and disease. Academic biology is just now beginning to hear and to answer this call, and, happily, to its own great benefit as well as that of the public. All biology that does not culminate in practical anthropology or humaniculture is a scientific torso, a pedagogic abortion. Thus, to-day the real test of a student of biology is how much of a humanist he is made by his work. No science has so neglected its utilities.

As to *industrial education for girls*, the chief fact that meets us is that, whereas every boy expects to enter some

wage-earning vocation for life, hardly a girl in the teens dreams of doing so, except temporarily. Her ideal is to marry, sooner or later, and be supported, and, therefore, she cannot put her heart into a trade. Indeed, to do so suggests to the budding girl some degree of renunciation of future wifehood and spells some elimination of romance and love from her life. We must look into the girl's heart to fully understand why, although she crowds into every open door of occupation as never before, she so generally refuses to serve a long apprenticeship needful to enter the skilled crafts. By the end of the grammar grades about ninety-nine out of every hundred girls leave or have left school. Neglecting these, the good shepherds of higher education have focused their attention upon the one, as in the song of "ninety and nine" who were neglected for the one who strayed to high school or college. Those girls who take out employment tickets, whether they do so to help their family, to dress better, or to have pin money, are chiefly interested in their present wage, week by week. Woman has always worked and always will, but the capital problem is, How can we give the training needful for the better-paid industries without detriment to the prospects of marriage, which in fact comes to some ninety-three per cent of her sex in this country and which almost always means exemption from self-support, since in fact only six per cent of the married women in the country with living husbands are wage earners?¹

Of the 23,485,559 adult women in the United States, 20.6 per cent were engaged in gainful occupations. There were some 16,700,000 women over twenty-five years of age, of whom one out of eleven

¹ See Statistics of Women at Work. Based upon the census of 1900. Government Printing Office, Washington, 1907, p. 399. See also Devine, E. T.: Social Forces. New York, Charities Publication Committee, 1910. 226 p. Carlton, F. T.: Educational and Industrial Evolution. New York, The Macmillan Co., 1908. 320 p. Marshall, Florence M.: Industrial Training for Women. (National Society for the Promotion of Industrial Education, Educ. Bull. No. 4), October, 1907. 59 p. Rooper, Thomas Godolphin: The Tree of Knowledge and the Tree of Life. In Selected Writings. London, Blackie, 1907. 293 p., pp. 156-163, Report of the National Conference on Industrial Training of Women and Girls. Held in the Council Chamber of the Guildhall, London, October 6, 1908. Devine, E. T.: The Economic Function of Woman. Annals of the American Academy of Political and Social Science. 1895. Vol. v, pp. 312-326. Brandeis,

had been married and yet was a breadwinner. Twenty years before, in 1880, the women workers in the United States numbered 2,353,988. Now, had this number grown in proportion to the population, it should have been in 1900 only 3,557,689; but there were "recruiting stations labeled destitution and higher standards of comfort," while more women for whom work was not an absolute necessity came in to win economic independence. Hence, at the beginning of the new century the number really was 4,833,630. Twenty per cent of the women of sixteen years of age, 30.6 per cent between fifteen and twenty-seven, and 18.8 per cent above ten years of age were wage earners. In 1907 it was estimated that one third of the girls between sixteen and twenty-four were working for pay. It is unfortunate that this census schedule does not distinguish employers from those employed, nor work done at home from that done in shop or factory. Various city statistics indicate that from fifty to seventy-nine per cent of the girls from sixteen to twenty are earning outside the home. Besides this, many from fourteen to sixteen are drifting from one unskilled occupation to another. Florence Marshall estimates that from fifty to eighty per cent of women between fourteen and twenty work outside their homes for wages, while very many younger ones enter juvenile employments that unfit them for further usefulness. Hard and Dorr estimate that in the thirty years ending 1900, while the population of the United States has increased ninety-five per cent, the women workers have increased one hundred and ninety per cent, or twice as fast. Sixty-eight per cent of all female workers are single; between fifteen and twenty, thirty-two per cent work; from twenty-one to twenty-four, thirty per cent; from twenty-five to thirty-four, nineteen per cent, and the proportion thereafter declines. In 1905 there were 393,691

Louis D., assisted by Josephine Goldmark: *Women in Industry*. Decision of the U. S. Supreme Court in *Curt Muller vs. State of Oregon*, Upholding the constitutionality of the Oregon 10-hour law for women and brief for the State of Oregon. Reprinted for the National Consumers' League. New York. 1907. 122 p. Part I of the Annual Report for 1905. *Industrial Education of Working Girls*. Boston, Wright & Potter Printing Co., 1905, pp. 1-38. (The Massachusetts Bureau of Statistics and Labor.) *Technical Education for Women and Girls at Home and Abroad*. Pub. by The Women's Industrial Council, 64 p. Cadbury, Edward, Matheson, M. Cecile, and Shann, George: *Women's Work and Wages*. London, Unwin, 1906. 368 p. Kilbourn, Katherine R.: *Money-making Occupations for Women*. 2d ed. Washington, Neale Pub. Co., 1901. 177 p. *The Fingerpost*. A guide to professions for educated women, with information as to necessary training. Pub. by the Central Bureau for the Employment of Women. 1906. 244 p. Richardson, Anna Steese: *The Girl who Earns Her Own Living*. New York, Dodge, 1909. 283 p. Willett, Mabel Hurd: *The Employment of Women in the Clothing Trade*. Columbia University Thesis, N. Y., 1902. 206 p. *Industrial Education of Working Girls*. Mass. Bureau Statistics of Labor. 1905. Talbot, Marion: *The Education of Women*. Univ. of Chicago Press, 1906.

working women in Massachusetts, who worked on the average about seven years. A Boston trade school circular estimates 12,000 girls from fourteen to sixteen working in that state. The middle-class woman has new ideals to-day of commercial independence. Marriage and fecundity are in general inversely as opportunity for employment outside the home, the integrity of which is now so threatened. This means, too, a social revolution. About one fifth of the married women in industry are widows, many of whom have to support themselves and their children. One seventh of the adult women of our cities are wage earners outside of the home. Single women of American parentage contribute less to the family income than do those of foreign-born parents. Of the total number of women employed, eighty-five per cent are single and forty-four per cent are between sixteen and twenty-four. The large proportion of these were, as girls, quite too poor to indulge in the luxury of industrial education.

Of the 303 industries noted in our census, women are employed in 295, or all but 8, although the majority of them are found in less than a dozen. Men are found in every feminine occupation. There are, for instance, 4,800 men "seamstresses." Most of the great industries and nearly all of those in which women are found are subdivided, often minutely, and where this is done women are found in the unskilled lines. In the factories they are packers, sorters, etc.; in the mills they are doffers and spinners. In making shoes and gloves they stitch, glue, sew on buttons, but are rarely lasters, cutters, designers, or drawers-in. Even where food products and confectionery are made, they are very rarely more than semiskilled. The effects of untrained women upon, e.g., dressmaking means deterioration of the product.¹ Our stores are flooded with garments poorly made and designed and tasteless. Very many of our models come from abroad. We doubtless have talent, but no apparatus for discovering it. This means constant shifting and breaking-in new workers and waste. Girls do not know where they will be six months hence, but they want their five or six dollars a week now. Some firms lose one quarter of their girls every year and employ two teachers to break in new ones. A few employ men at a larger wage because they will stay.

Thus, although we obscure or almost seek to obliterate sex distinctions in the school, they almost smite our boys and girls in the face the moment they emerge to enter industrial life. The mere fact that both sexes are found in nearly all callings is utterly misleading, and instead of suggesting equality, teaches progressive differentiation of departments, kinds of

¹ Marshall, Florence M.: Industrial Training of Women. Annals of the Am. Acad. Pol. Sci., January, 1909. Vol. 33, pp. 119-26.

work, ways of doing it, degrees of efficiency, and these diversities are increasing. In factories, men are more and more employed in one process and women in another, and this increases with the progressive and now, from the standpoint of humaniculture, intolerable subdivision of labor. Thus it is an error, although a very common one, to infer that men and women in a given industry are doing the same things in the same way. Nevertheless, we are making real progress, though in a slow and blundering way, toward an economic condition where men and women will each be found doing just the things they can do best. In an interesting symposium¹ it is stated that the reason why women have followed their own industries from the home into the shop is in the increased cost of living. This doubtless does interfere with marriage and contributes something, unconfessed and unconscious though it be, to increased aversion to wifehood and motherhood, especially now when to many of the very best young women wedlock is a realm full of doubts and fears. They have only too much reason as they look about to falter before making the experiment. Their entrance upon industry has individualized them. "The time is past when she can be made to sink what she regards as her own personal interest in that of the race." "One of the chief dangers to which unmarried women who are not overworked are exposed is the tendency to become eccentric, whimsical, casuistic, or cranky, and a single woman of forty or over who has kept her ideas and sense of proportion is a vastly superior, if a very rare, person." The woman in business, even if she does lose a trifle of the old charm and innocence and seem a little mannish to conservative men, is probably less likely to go wrong than her idle sisters. Woman is man's superior in her own sphere, but is not his equal in his. In industry she can escape chaperonage, which the American girl hates. She also often escapes the humdrum of home and domestic duties, but her health is jeopardized more by the pace than the load and the lack of wholesome recreation, for it is not hard work but excitement that is to be feared. Servant girls, nurses, teachers can keep pretty

¹ The Place of Women in the Modern Business World as affecting Home Life, the Marital Relation, Health, Morality, the Future of the Race. Bulletin of American Academy of Medicine, October, 1908.

well and do much work, but we are now developing unique types in shop, telephone, and other classes of girl employees who rarely lay up money and who want both men's and women's rights and to escape the duties of both.

The industrial field is always changing. Since 1870 men telegraphers have increased six-, but women twenty-fold. Nearly all successful business women rise from the ranks, and have started with not more than six dollars a week. The college girl, like the boy, needs to begin at the bottom. We can only snapshot the present moment, so rapid are the changes. Servants and waitresses, in the thirty years ending 1900, increased less than six per cent, while boarding- and lodginghouse keepers increased 742 per cent. Women in professional services in these thirty years increased from 92,000 to 430,000; in transportation from 20,000 to 503,000. Girls are especially prone to pick up odd jobs where they can learn speed quickly, like warping braid, sorting silk, tying fringe, taking out and putting in buttons in a laundry, dipping candy, and assorting things. Moreover, expert work is almost always in the hands of men and is protected by their unions, from which women are excluded and have very few of their own. Girls lack serious attitudes in their work, hate responsibility, can adjust to cheap modes of living, and can do very monotonous work. The latter brings apathy and tends to carelessness of moral and physical standards, and as a reaction impels her to seek amusements and excitements evenings, even though it be dear. She does not realize that in fact matrimony is better paid and probably, on the whole, easier than any other vocation open to woman, and that it would be better paid yet were it recognized as a business and carefully learned and studied like that of a nurse.¹

Girls used to be indentured, apprenticed, or bound out like boys till eighteen or twenty-one, or till marriage. In these old colonial days it was often specified that such girls should be taught to read. A servant who could spin or weave earned more. At the beginning of the last century many women not only made wines or preserves or kept shop, but knit, spun, wove, and perhaps sold their products. In many places work was put out to them, supplies being given and products taken back, especially weaving, spinning, and palm-leaf hat braiding, pay being sometimes given in goods from the store. Lace was made in this fashion; so were woolen cards, teeth being set by hand. Much factory work was thus "given out." In the eighteenth century many women were compositors, both of books and newspapers. The greatest depression in cotton, woolen, silk, and boots was in 1870, and it was then that the percentage of women

¹ See in Everybody's Magazine a series of articles, "The Woman's Invasion," November, 1908, to April, 1909.

employed was the largest. In the early days of the factory system there was no prejudice against women, and no social problem. In colonial days the courts required that every woman should keep employed. When Harriet Martineau visited this country in 1836, she found women in seven chief occupations, though they were employed more or less in nearly a hundred, the shoe industry being a close second to cotton mills. But even then the working women were unorganized, exploited, and lived in ways known only to the poor. Miss Abbot¹ says that in the early days of the cotton mills women at first did what had originally been girls' work, but for the last three quarters of a century operatives here have increased less than the rate of population. It is difficult to find all the reasons for this slow but sure pressure. One was a new machine for yarn spinning, the slasher, in 1866, which made more men needful. From 1825 to 1850, in Lowell, the city of spindles, Lucy Larcom and many bright Yankee girls worked and published the *Lowell Offering*. This life was a rather select industrial school for girls, who went from the farms and returned with money, better dresses, manners, and more intelligence. They were obliged to attend church, pay a small fee, retired at a certain time, could not walk beyond bounds, food was prescribed, and to all this and to the company stores the girls submitted. They often paid off home mortgages, listened to lectures by Emerson, Adams, and Everett. There were improvement circles, loan libraries, missionary and debating clubs. Girls were discharged for reading the Bible in the mills. At one time there were 150 who had been teachers; most were between sixteen and twenty-five. The death rate was low, and it was a badge of respect to have worked here. Now only eight per cent of the operatives are of native parentage. In the cotton mills of the country in 1850 there were two women to every man; in 1900 there were more men than women.

In *Everybody's Magazine* for January, 1909, it is shown how social distinctions have driven "Maggie" from the factory to become "Miss" in the department store at a sacrifice of from three to five dollars a week. By half past eight, in Chicago, 25,000 women are at work, 20,000 of them in department stores. Early in the morning girls who have worked all night in the telephone exchanges and restaurants, going home from their night shifts, meet factory girls who must be on duty at seven. "Salesladies" are a unique and rather monotonous type. A store gets for six dollars those who could earn ten in the shoe factory, and a worn-out glove girl will give up eight dollars and a half to begin in a store for five. These girls have much style and energy, considerable social life, pick out their lunch; there may be a piano in the storeroom; and more than half of them are of American parentage. A six-dollar

¹ Abbot, Edith: *History of the Employment of Women in the American Cotton Mills*. Jour. of Soc. Econ. Stud., Nov. and Dec., 1908. Vol. 16, pp. 602-621 and 680-698.

girl perhaps sleeps in a room with three others, at \$2.75 a week for bed, breakfast, and dinner. She washes most of her clothes at the club laundry for five cents an hour, and can haunt bargain counters, with perhaps \$1.55 a week to spare. She very likely reads, goes to lectures, theaters, is generally straight and pure, so that the department store is often a climax of this girl's social ambitions, although she remains here usually but a few years. At a pinch she can always fall back upon domestic service, "in which no degree of incompetence is a bar" to her employment.

In trades with a little expertness there is often a long slack season, so that, as Odencrantz¹ showed, this is the chief cause of irregularity of employment. One quarter of 221 graduates of trade schools had given up their trades and taken to steadier work at a lower wage. About two thirds of the female operatives in New York work on goods that have a seasonal and irregular demand, at a wage of about six dollars per week. This is the case with millinery and machine straw hat making and many forms of novelty work. Some supplement by another industry which is in while the first is out of season. Girls are more readily discharged than men because they are less unionized. Men's unions are in general hostile to women. It is often said that every one employed leaves a man without a job. Still the union has always stood for the same wage scale, while in England it advocates twenty-five per cent less for women. A half-serious article calls women "the white Chinamen of the industrial world." "She wears a coiled-up queue, and wherever she goes she cheapens the worth of labor." In one case a strong girl operating heavy machinery in a hardware factory superseded her father at half his pay, and doing twice the work he did. In 1890 the wrapper-classer in cigar factories received twelve dollars a week, but during the following decade he was succeeded by women at six dollars. She is not paid at the same rate even in proportion to her skill or intelligence, but always approximates a fixed low level. In Birmingham, in a bicycle factory employing eighty men, sixty were discharged and ordered to send their wives back to take their places. A man who has spent two years in learning a trade cannot compete with his eighteen-year-old girl who spends two months in learning a job.²

It is tragic that married women, especially mothers, must leave home to work, for their influence upon children is more

¹ New York Census of Manufacturers, 1905, Bulletin 93.

² Fall River is the chief American cotton town, where more white women are working in proportion than in any other place save Lowell, another cotton town, and where more white babies are dying proportionately than in any other city in the Union save Biddeford, Maine, another cotton town. While in the United States at large about 21 women in every 100 are working, in Fall River it is 45 out of 100. Between the ages of 16 and 20, 78 per cent earn in Fall River. Work

than that of teacher and father combined. Specialization has given her a secure place, but it is too near the bottom of the industrial scale. Its effects upon the father, too, seem bad, for statistics show that more men whose wives go out to work drink, although we cannot yet surely distinguish cause and effect. A man who cannot support his family must suffer in self-respect. As yet we have almost no laws in any state prescribing the length of time before or after confinement when women must abstain from outside work. Again, all medical authorities agree that one of the prime hygienic needs of woman is a period of monthly rest, and this no industry permits. In the old home occupations she could regulate her work, but not under modern conditions. This cannot fail to cause subtle and progressive deterioration. Never in all her history has she been so situated that she had no control over her health and comfort in this respect. In occupations which require strain of nerve and brain that are unwholesome, involve hard muscular work and prolonged standing so often required of salesgirls, for instance, that they seem alert to customers, and that involve special regimen for the feet until they are accustomed to it, this wastage is incalculable. All this is particularly hard on girls in the early teens whose lunar regularity has not been fully established and while the devel-

begins at 6.30 A.M. when the blazing lights are turned on, and one minute later everything is going. Every minute of the working day Fall River makes two miles of cotton cloth. Every Saturday afternoon the girls crowd the sidewalks and stores. Just now in the lower forms of mill work the Portuguese are driving out the French Canadians, as they did the Irish and they did Yankees. The weaver-room girls dress with taste and look down on the spinners. Of 10,274 cotton workers here, the parents of only 345 were born in the United States. This means distance and often antagonism between capital and labor. The working week is now 58 hours in place of 81 as formerly. The improvements that have been effected are largely due to the presence of women, for when they stop working men must stop, so their presence here has lifted the weight of excessive toil from men. But the tension is increased. Instead of one loom, now from six to twenty may be tended by a single person, with a piercing monotonous noise that never slacks. The speed tenders work in rooms full of cotton dust and with tropical heat and moisture. The effects of this substitution of the power loom for the hand loom are seen in that whereas in 1900 in the registration arrears of the United States out of every 1,000 babies under one year of age 165 died, in Fall River it was 305, where the mortality was greater than in any other city except Biddeford, where it was 311. In Providence, less than one fourth of the deaths were of children under five, in Fall River it was more than one half.

opment of all the organs and functions involved in reproduction is most rapid.

A number of excellent general surveys of occupations open to women have lately been made, such as those of Miss Kilbourn, Miss Richardson, and in England in the *Finger Post* by some two score authors, and the best industrial schools for girls aid them in at least avoiding bad and often in deciding on and starting in suitable trades. Women are also now rapidly finding or making new positions for themselves among the subdivisions of labor, and sometimes creating new callings for their sex. As they advance in the twenties or thirties they often display great ingenuity and originality in devising novel products and kinds of service. Never was it so apparent to the world that there are a vast number of things in which women can far excel men as in the industrial phase of the "war of sex against sex." Woman should, of course, give special attention to these, and one vital part of her industrial training, and that at an early stage of it, should be given to a wide comparative view of the different callings open to her. The employment and vocational bureau function should be magnified. Naturally she does not take to specialization as readily or as early as man. Yet in many of the highly complex industries she finds herself doing a single small and monotonous thing all day that is dwarfing and destroying to her body and soul, for work that is automatic and does not occupy the mind is, as has often been pointed out, in many ways deteriorating. To take an extreme case, in Chicago, where women fix wooden handles to the metal shanks of screw-drivers, they must make 750 push-kicks per hour. Surely industry should not so ill-use woman as to return her to society a neuter or a semi-invalid.

In the Pittsburg stogie factories (Miss E. Butler's Pittsburg Survey) the girl does not make a whole stogie. She is a bunch-breaker, filler, or binder, or works at the suction table. Two girls and three machines now do what one man did before, very much faster and cheaper. And this involves a social change, for "woman has not risen to man's skill; skill has been lowered to woman's level. Woman has not been masculinized; work has been feminized." "Women enter the factories usually as adjuncts to simplified machines and subdivided tasks." Again, there are almost no women watchmakers who can put a whole watch together and make it go,

yet women watch workers are rapidly increasing. Their speed and precision are remarkable. In a cardboard factory, where a box must be bent ten times, 1,800 are made in a nine-hour day. Woman's capacity for doing such things seems almost superhuman. In 1900 41,294 women were employed on watches, forty per cent of all employees, but a large influx from Bohemia, the invention of machinery, the greater docility of women, are factors.¹ In most factories speed, strain, and nervous tension increase, and this, taken in connection with the instability of woman's nervous system, is a very grievous evil. Telephone girls on duty for five hours often suffer from nervous debility, for this is harder than teaching. A physician says "after four or five years many of these girls leave the service and marry, but they often break down and have nervous children," so that the physical racial cost of woman's work is great. Many women workers rise very early, take wretchedly inadequate breakfasts, have very short hours for lunch; if their work is sedentary and monotonous, abdominal and pelvic organs are liable to lose their tone, the chest to grow flat, and recuperative power to abate. England has effected much amelioration in this kind of work by a system of medical examinations. After a rush period, with overtime work, doctors report an increase of from one third to one half in their patients from this class. Surely an eight-hour day is enough for women, and yet there are to-day many factory girls of sixteen working thirteen hours.

Another curious point has arisen here. A court has declared that the law has no right to dictate to what extent the capacity to labor may be exercised by those who have this commodity to dispose of. Yet New York forbids factory work after nine at night for women. Should it make any difference if she is a willing worker? Some claim that the right to work when, where, and as one pleases ought to be as inalienable as the article that no person shall be deprived of life, liberty, or the pursuit of happiness without due process of law. Labor is property, and the right to sell it is liberty. In September, 1906, at Berne, fourteen nations made a concerted effort to relegate women to their old positions as dependent state wards by abolishing most night work, and in 1874 Massachusetts led this country in restricting the hours which women should work in certain industries. Seventeen states do this to-day, twelve forbid work in mines, five regulate their handling of dangerous machinery, six the amount

¹ Butler, Elizabeth Beardsley: Women in the Trades. Pittsburg, 1907-8. N. Y. Charities Publication Committee, 1909.

of time for their midday meal, thirty-one compel employers to supply seats, and twelve require decent toilet facilities. Shifts every three to five hours have also been enforced. This kind of legislation has been declared constitutional in several states.

The first law of this kind here in 1844 applied to men as well as women. Many old abuses, at any rate, are thus being remedied, such as flax spinning, where women still often work with bare feet, with the flying whirlers spraying water upon their breasts, protected only by a burlap waist, and where they work in great heat and their clothes are so steam drenched that when they put them on at night there is great danger of colds, as of mull fevers where the air is charged with dust and suction machines are not enforced. Sweating has been greatly abated, and yet sewing girls on piece work often eye the clock at every pause, and are tense if they fall behind their pace till they have caught up. So in sorting letters, if the piece rate is cut down twenty per cent one must do in four minutes what was done in five. The power to perform this rapid monotonous work at maximal speed lasts but a few years, and the fast workers soon lose their pace. Only the wiser ones quit racing and realize that whatever they make above a certain sum goes to the doctor. A glove speeder who turned out five dozen a day at \$2.50 caused a cut in the wages, but it was said that the extra money was refunded to her for speeding up the room.

Florence Marshall urges that work that occupies thought is a very precious safeguard against evil at an age when something in life must be found that is intensely interesting and exercises the mental powers. Those who take up unskilled work with no chance of advancement and live on wretched wages are almost certain some time to meet the tempter, and perhaps to do so often. All these experiences render them unfit just in those qualities that make for maternity and domesticity. Subdivision of labor not only means deterioration of producers, but it gives "industry and the civilization that rests on it an unstable basis." Women now buy many things that they once made. On the other hand, we must not forget that some industries have a high intellectual and moral value, and W. I. Thomas thinks that man's education in general should be more occupational and gainful. He thinks every mother should be relieved of her children and they of her for some portion of the day. There is now a National Woman's Union League, under Mrs. R. Robbins, with an organizer,

Miss Fitzgerald, and Miss Agnes Nestor, the latter one of the most striking figures of a new type, the genuine working woman leader. She has worked in every glove department, and now drives bargains with the employers, shows them their interest, and they listen to her. Because women stay so short a time they submit to abuses, and if the latter were removed they would stay longer. When trades are so carefully studied that they can be marked on a scale of healthfulness for girls there will be a great gain. London has a system of municipal employment for unemployed women. There should be more of this, so great is the demand for domestic servants, but London has now three workrooms open to women who may be sent there by any of twenty-nine distress committees. The maximum period is sixteen weeks at a time; the market for their products is, of course, an artificial one, and their earnings are determined by the number of dependent children, i. e., ten shillings a week for herself, two more for the first child under fourteen, one shilling sixpence for the second, and one shilling each for the remaining children under that age, with a deduction of one fourth for the earnings of each child over fourteen. These women are given dinner, tea, carfare, and work forty-eight hours a week. The work is tailoring and hand knitting. It is hard to make incompetent old ladies from forty to sixty, some of whom are unhelpable and have never used a needle, really earn much. The few industries that find it profitable to employ girls just out of school pay wretched wages and get incompetent and unreliable help. Many of these industries need almost no training at all. Industrial schools for girls must take great pains in selecting the industries for which they fit. The best trades for their purpose are those, as Mary S. Woolman says, which require expertness, employ large numbers, which are hard to learn in the workshop, which pay good wages, offer promotion on merit, with favorable sanitary conditions. Girls seem to be more sensitive to these than boys. According to one estimate, the very least desirable industries for women employ nineteen per cent of them,¹ while the more desirable

¹ Marshall, F. M.: *Industrial Training for Women*. Natl. Soc. for Promotion of Industrial Education. Bulletin No. 4, 1907. 59 p.

group, such as the manufacture of cloth, clothes, shoes, hats, jewelry, printing and publishing, employ some sixty per cent of the more or less skilled. Some now advocate that women should be excluded from the first or lowest class. It is estimated that at least three fourths of the younger girls enter the more undesirable industries. Surely, if the average girl works for five years, we ought to do something to fit her to do so, and probably such training would pay from a purely mercantile point of view.

The best European countries surpass us. Technical education for girls in France began in 1856 and the first professional school was opened in 1864. Both these types seek to turn out elite young workmen, require an entrance examination, careful study in the morning, and training in the afternoon. A wide variety of industries is taught. Most girls trained in this system become either forewomen or teachers of their craft. There are now six municipal schools for the technical training of girls in Paris, which fit either for trade or business. The chief obstacle here comes from employers, who do not see the advantage of developing all-around capacity, but want one-branch apprentices, although it is overwhelmingly proven that these do not "arrive." All depends upon the teachers. Girls often enter as early as twelve. Not only instruction is given, but there are often scholarships, midday meals, and clothes to those who need them. The pupil must not look to the school as an employment agency to help her in finding a position, but must trust to her own merits. When the women's societies in Germany established both extension classes and industrial schools, the *Little Verein* (Berlin, 1866) assumed control. In Baden every girl of fourteen who earns a living must attend a continuation school for three hours a week for one year, or her employer is fined. The schoolroom is usually fitted with a kitchen, very simply. The girls often go to market with the teacher, and later alone, with money and notebooks, and there are lessons in lighting fires, heating water, ready reckoning, each of the chief articles of food, with prescribed reading. In industrial districts where both sexes work in the field, they are taught in compulsory classes. So effective is the training that those who take it rarely find themselves in competition with those who have not done so, but receive a larger wage and more ready employment. Often in schools of commerce, as well as trade, all girls learn to cook and mend, perhaps make children's clothes out of old ones of adults. The country has fully waked up to the fact that money spent on girls' education is not lost. Among the various kinds of industrial training in London are schools intended to teach young wives to wash, cook, iron, make their own dresses. These make the very quickest and most eager pupils. There are

often peripatetic teachers who hold classes in clubs and other institutions on dressmaking, millinery, first aid, nursing, etc. Training schools for infant nurses have lately assumed great importance on account of the increase of infant mortality. Surely the care of children must be raised to the level of a profession. Even the Froebel-Pestalozzi House trains children's nurses.

In this country the Boston Trade School for Girls was based on a careful local study. In 1910 more than half the girls of high school age in the city were earning money. Before this movement there was no opportunity for training for Boston girls. It was found that dressmaking, millinery, clothing, machine and straw operations were the best trades. A policy of the school is to train girls in two allied seasonal trades so that the slack period of one fits the busy period of another. Each pupil selects a trade which requires about a year. Sessions are from 8.30 A.M. to 5.30 P.M., five days a week. On the average there are five and a half hours' daily work in the school, with two hours of supplementary work at home. The school year begins the first week in July and receives pupils from fourteen to seventeen, although they may be admitted whenever there are vacancies. Those who cannot afford the slight expense are aided. The annual cost per pupil is a trifle over \$100. It was found necessary to admit girls of fourteen without reference to schooling and allow them to enter and withdraw at any time, so that girls enter from the fifth grade to the high school. There is overcrowding and a long waiting list. Useful things are made. Should such a school be self-supporting if it sells its products, and should they be up to the market standard, or will this make the trade school a mere business venture? On entering, each girl fills out a blank concerning her family. Her home is visited, and on this basis she is advised what trade to pick. There is a school record of her strong and weak points. Girls are helped to places and employers asked to report after two weeks. Girls from this school earn all the way from four to eighteen dollars per week, and the demand is greater than the supply. Trade school certificates are given those who attend twelve months and average 90, and a record of their career is kept. There is a Pioneer Club of old pupils for fellowship and for extending the influence of the school. The Woman's Educational and Industrial Union also maintains trade school shops, where those who have attended for one year but do not feel quite ready to enter an industry can support themselves by having their products sold.

The Manhattan Trade School for Girls, in New York, opened in 1902, admits all the way from the fifth grade up, but with less study of local demands, and appealing to rather a low class of wage earners. Millinery is far better in Boston than in New York, while the reverse is true for pasting and novelty work. Dressmaking is more specialized in New York, while power machine work is best in Boston and employers take more interest in their girls,

who are on the whole better trained, although more are foreigners and both poverty and health conditions are worse. The Manhattan School is open the year round and instruction is free. In 1907 there were 433 pupils, and the expenses for the year were \$67,000. Most pupils remain from six months to two years. During the recent depression free instruction was given to girls thrown out of work, and in 1907 trades were taught to crippled children. Work is adapted to aptitudes of pupils. There is academic instruction. About one third take dressmaking. Each keeps a time book to show how many hours are given to each dress. The Alliance Bureau places about half of the girls from this school. In 1907 about \$12,000 was received from order work. There are several evening courses. Lunches were brought from home, but warm meals are also served. The school aids those in poor health. It teaches cooking. Some pupils are little housekeepers whose mothers are sick or dead. Twenty girls are chosen at a time and divided into two groups for six weeks' daily instruction. Each receives thirty lessons, which is about a year's course in cooking in the public schools. The relation of employer to employee is part of the course. There are several auxiliary associations, also a student council and an aid committee of representatives of social settlements, with trade certificates at the end and physical examinations required.

The Hebrew Technical School for Girls examines every applicant personally, preferring orphans and half-orphans who are supposed to be grammar graduates. Ninety-five per cent of the parents are foreign-born. In 1909 the average daily attendance was 355 and the average entering age 14.7. The courses are eighteen months. The commercial and manual cannot be taken at once. The hours are 8.45 to 4 and instruction is free. There is no night work, no vacation, but lighter work and more physical training in the hot months. Of former pupils, 971 earn annually \$560,000 on an average, or \$48 per month each. The school is maintained by voluntary contribution and costs \$45,000 a year.

Dressmaking and millinery were first curriculized in this country at the Pratt Institute. The ideal taught girls was, instead of having best and everyday clothes, to have all best for each purpose, for this varies the problem. All applicants must be eighteen and pledged to stay a year. The course was general, including the history of costumes, business methods, physical culture, plenty of draughting, cutting, talks on color, on buying, etc. Each makes a number of dresses for herself, and the profits of all costumes and sales work, less ten per cent, go to the maker. Shops must be visited and fine discriminations made. The widening difference between indoor and street gowns and modes of trimming affords ever greater opportunity for the display of talent. Now courses long and short are given in many places, so that we have here a rather striking instance of a strong, natural instinct turned to educational uses. Hence it merits a little more attention. With the

dawn of the teens come with girls an intense interest and zest in dress, and perhaps especially in hats. Even the very few who go wrong to indulge in this passion for finery show how intense it is. Thus here is a great natural force, mainspring, or reservoir of psychic energy which it was up to pedagogy to utilize. This interest has been studied statistically repeatedly, and about half the girls at nearly this period seriously think of becoming milliners or dressmakers, so important does the dress problem loom up to them. The teacher's question is how much wholesome information this zest will absorb and vitalize, and how elaborate culture machinery it can be made to run. The pedagogue just awakened to the need of industrial education visits establishments, sees processes, and then sits down and works out a systematic, thorough, logical course that seems so orderly and symmetrical and gives its author such complacency and is launched with much labor, and perhaps expense. But these prospectors omit to study the most essential factor in the problem, viz., the desires and interest of the girls themselves; and so, while such courses start well and a few persevere, most of those for whom it is intended and who are expected, fail to come or drop out by the way. The demand for a few lessons, perhaps a dozen or less evenings, in learning how to trim their own hats in the spring and fall is very great, but, as a teacher once said in my hearing, "These confounded girls are so frivolous and light-minded they won't touch our best curriculum here." It is the old and tragic story. The pedagogue assumes, instead of realizing that he must create interest, go where it is, take it as it is, and then slowly nurse, evolve, cultivate, and elaborate it. It is not enough in this country to make courses out of what parents want for their girls, or what workers with them think they ought to want, but the start here, if it is to be successful, must be made with what the girls now desire. This is the raw material, crude enough, perhaps, but which must be developed slowly and laboriously to an ever more finished product.

Admirable as the above ameliorations are and great as is the advance they make upon the "brain refinery" methods of, e. g., the stock classical high school which is so obliterative of personality, even the further progress so needed in the direction of trade schools will never solve the chief problem of woman's education. Wifehood is the vocation of ninety-three out of every hundred women in the land, and motherhood also of the great majority of these. Thus, women are to-day taught least of all the things they most of all need to know, viz., home-making and child-rearing. In these matters the average American woman to-day is ignorant and incompetent, and the school is doing little to improve her in

these most vital of all respects. She is growing independent of and indifferent, if not averse, to wedlock, more unwilling to have children, less able to nurse or even to keep them alive the first year, if not during the first five years of life, as our sad and well-known statistics show. Her fling at a trade makes home distasteful. She has not grafted the tree of knowledge on to the main branch of the tree of her life, but at the best only on to suckers. She does not know how to buy, and yet, as Devine has well shown, she largely determines consumption and markets. Schools for the care of babies, now successful in various parts of Europe, the American girl would avoid, and to study children, even in college classes of psychology, seems to her almost like "casting her sex in her teeth." She too often prefers to forget she is a woman and to exult in the glorious liberty of the sons of men rather than in that of the daughters of women. Statistics show that about one fifth of our girls pass through a period in which they seriously wish they had been born boys. As beaux or husbands, men do not come up to their ideals and do not satisfy them, and that is largely our fault, as I have shown in Chapter IV. Nor do they satisfy us, or there would be more and earlier marriages, more domestic content and home staying, and less divorce. Our education must assume that girls will marry and not that they will be single and self-supporting, and that wedlock, if it comes, will take care of itself.

Teaching trades and teaching domesticity are two radically divergent things. The pedagogy of the two differs profoundly and in ways all of which are not yet realized. The first is more special, the last more general education. One gives skill and technic; the other is more all-sided, varied, and evocative of the whole personality. One tends away from and the other toward home-making. One makes woman a competitor of man and the other gives her a field more to herself. One throws the stress on certain parts or functions and leaves others to atrophy; the other calls out more all-round and diversified activities that are more favorable for full physical development. One makes woman independent and more able to win her way unaided; the other brings homey and homing thoughts and dispositions. This latter consideration is per-

haps the most profound of all. Other things being equal, girls with more potential wifehood and motherhood in their souls and bodies would always choose the latter, and those with less would gravitate toward the former. But other things are not equal. A trade school is far easier to establish and curriculize than a school of domestic arts of equal grade, in creating which woman can both follow and get more aid from man. In the latter she must take her stand upon her own sex and is left more to her own resources. The one type of education is easier intellectualized, the other is better moralized. One makes woman more insistent, the other more consistent with her nature and history. One stresses her rights and the other her duties. One makes her realize the annoyances of children and the other predisposes her to love them and gives her thoughts and feelings a more homey turn, and so sweetens, sanifies, and broadens the emotional life. The danger of one education is that it will incline those who take it to selfishness, while the other is full of altruistic influences. One interests her in business, the other keeps her nearer to the fundamental problems of life, health, reproduction, disease.

At present a domestic department is often dangerous, not to say almost fatal, to the success of an independent trade school for girls. Those pupils who specialize in practical home economics are regarded as on the lower social plane. Their activities suggest menial if not servant-girl work. The attitude of girls is often not unlike that of the colored race shortly after their emancipation, to industrial education. They felt that freedom meant exemption from work, and such training as this recalled the old state of servitude. Schooling they regarded as a means of raising them above the necessity of physical toil. So our high-school girls fill the Latin and algebra classrooms, feeling that, once initiated into these subjects, they are best of all safeguarded from the dangers of kitchen work. Boys, too, once felt that secondary education afforded them the easiest way to escape from the farm. But, thanks to the new agricultural renaissance, this prejudice is much overcome. Only another movement of no less dimensions and force than the agricultural revival, which should be our paradigm and inspiration here, will ever bring about a

similar reconstruction of girls' ideals concerning domestic education.

The following are better: In the vocational school at St. Albans, N. Y., the girls learn practical housekeeping in the kitchen and a dining room, which are simply furnished, the former only with a plain coal and gas range, work table, sink, and dish closet, and the dining room with only tables, chairs, a china closet, and a simple table. All the tablecloths, mats, napkins, etc., are made by the girls, who are taught to sweep, dust, wash windows, have lessons in building the fire and care for the stove, sink, and tables. They learn to cook plain, nutritious dishes and to buy the materials they use, and to set and serve at table. They study nutritive values and expenses, wash and iron garments made in sewing classes, the aprons worn in school work, all towels, table mats, curtains, and keep a book of recipes used in cooking lessons. The sewing room is large and equipped with sewing machines and work tables, where the girls make simple garments for themselves and members of their families. They study cotton and woolen fabrics and are taught something about the different kinds of weaves, dyes, and are encouraged to collect and mount samples of the different kinds of material they are most likely to use. Very simple principles of design and color for table and wall ornaments, placing of tucks, ruffles, embroidery for underwear and trimmings for dresses are taught, and candle shades and lamp shades and pillow covers are planned and made, and as much academic work as possible is applied here.

The public schools of Columbia, Ga., are unique for the industrial education they provide for primary grades, where girls are taught home economics, cooking, housecleaning, laundering, floriculture, yard decoration. There are four domestic science centers, one for white and one for black children, each with elementary and higher grades. Every girl, white or negro, receives from two to five years of training in home economics. The negro girls prepare and serve a meal to their minister, and the white girls to six guests. They also make light refreshments for mothers' meetings, etc., and help prepare the school Thanksgiving and Christmas dinners. The secondary girls prepare and serve every day a school lunch, which is sold at cost to teachers and pupils. They also make and serve for visitors, of whom there are many to see this unique system. The secondary school is open eleven months a year, from 8 to 4, with a half holiday Saturday, and lasts three years. All who enter must be fourteen and have completed the fifth grade. Although tuition is free, both sexes are charged five dollars per term for books, etc. No foreign language is permitted, but other academic topics are taught. The last two months of the last year students must spend in practical work, if possible, and make daily reports. In the last graduation exercises each member demonstrated what she could do.

Cloth was woven, from it a dress was drawn, cut, fitted, made, and the valedictorian returned to the platform wearing it, receiving her diploma in that department.

In the Oread School of Worcester, which was essentially a school of domestic science, with cooking as its center, taking for the most part high school graduates from all over the country, the commencement exercises consisted in each girl or pair of girls making a dish. The salutatorian, in academic gown, made soup, explaining what she did while doing it on the stage. Then fish was cooked and served, while the valedictorian made and distributed ice cream. The longer processes like cooking and the hiatuses were filled up by changing viands, and all were served after the exercises were over. St. George's Parish has a model tenement flat where girls of the East Side, New York City, learn the arts of home-making. Several other churches have opened cooking and other domestic classes in their vestries.

College and university settlements, neighborhood houses, friendly aid societies, and many personal and club agencies besides the public and private schools teach some elements of home economics and household arts. Training schools for teachers of these subjects have lately been established at Columbia and at the University of Wisconsin and at a few normal schools. The intense interest often taken by girls as young as eight years of age in learning to cook a few plain dishes is very significant. They not only make themselves more useful at home but love the work itself. Indeed, it ought to have a very strong phyletic recapitulatory momentum comparable with that of boys for hunting, for it is probably as old in the history of the race. To be a good cook means more than memorizing a few recipes. It involves knowledge of almost every useful vegetable, plant, and spice, and the interest widens from that of the market to the very varied source of supplies. It involves neatness, order, system, good judgment, and taste in every sense of the latter word, presence of mind, and in addition to this a certain kindly humanistic disposition to really benefit all those who partake. Young boys have often been taught to cook with pleasure and profit to themselves and their families. From making fudges, rare-bits, roasting corn afield, and clambakes, to bread-making and a boiled dinner is quite a distance, but all the interval is bridged by imperceptible gradations, although we are not yet quite sure of the best curriculum. But certainly the young

cooker's appetite may itself often be turned on as a pedagogic motive. To eat what one has prepared ought to be a great pleasure, although it might be a punishment too cruel to inflict. A colored woman who long cooked for me felt genuine pride in all I did, as if it were really her work, and if I was indisposed, often felt her own conscience sore, on the principle, "*man ist was er isst.*" Cooking was one of the chief agents in achieving our civilization. Perhaps it may be called the first practical chemistry and be regarded as a good pedagogico-genetic introduction to that science. There are dinner givers whose good name rests largely upon the culinary art of their cooks, and not a few men as well as women are proud of demonstrating before their guests their own proficiency in making some special food or concocting some special drink. Those classes that are set the task of, e. g., "planning and cooking a good dinner for seven at a cost of fifty-two cents" face a proposition that challenges a great variety of their best powers of head and hand, not to say heart. Even the art of making and keeping a good fire, in which I find nine lessons in one course, is partly a product of innate genius, and is only in part one of the teacherbilia. Surely, water boils more easily for some than for others. Not only for the sake of the home should all girls become adepts in cooking a modest repertory of plain, wholesome dishes, but for their own sake and use, for all young women, however employed, should have both the facilities and the inclination to prepare at least one or two of their own daily meals, if for no other reason, in order to keep alive the flickering flame of domesticity on the hearth of their hearts. They should not be allowed to forget the truth of the adage that the way to a man's heart is through his stomach. Indeed, what man could long resist a maiden who thus laid siege to his affections? Culture history shows that this was once a potent stimulus and motive to culinary accomplishment, although it is now greatly in need of revival. Perhaps I am betraying the secret of my sex, but here is an ancient source of fascination that young women are neglecting to their immeasurable loss, provided they care for wifehood and settled domesticity. As to conjugal and domestic happiness, too, good cooking would do very much to prevent disrupted households, would keep the man from the saloon,

to which he often takes refuge to appease the needless cravings of his digestive apparatus; and would make boys more contented with home, for often a good meal served in the right way gives a physiological peace that passes all understanding. Why, then, in none of our cooking courses for little housekeepers is due attention paid to the splendid social settings of this high art? Its mere mechanism is good and is much, but the reinforcement of it from the larger, higher reservoir of motivation that ethics, historic and cultural value and relations could supply is the one thing needful which is lacking here. Not only woman's education, but her position in modern life would be vastly improved by a renaissance of the kitchen as the center of home influences. As long as most women neglect and despise the work which for a majority of their sex has always been and always will be so cardinal, they neglect the very center of the home and of their hearts. Most cooking teachers, if they do not lack due respect for their calling, at least do not glory in it, and until they put more pride into their work and set it in a larger, higher, intellectual horizon it will not attain the position we are now seeing that it demands and are beginning to desire it should have.

We need model kitchens of different grades; sizes, costs, with the best and simplest wood, coal, and oil stoves, sinks, etc. The kitchen should be well lighted, with a pleasing color scheme and as pleasant as the living room. Everything in it should be plain and arranged in the most economic step-saving way, with plenty of inexpensive utensils. There is no such educational environment for girls. It is more than stable, barnyard, and garden combined for the boys. Here even the daughters of the wealthy should be made to feel at home no less than in the parlor. They should be eagerly interested in all new devices. A well-equipped kitchen is a constellation of pedagogic agencies. The time is at hand, I believe, when there will be a kitchen in every grade school from which boys will not be excluded, for here they will learn useful things and their ideals of woman's work will undergo needed reconstruction. There should be cooperation with home kitchens and a carefully inaugurated scheme of mutual visitation. Spinster teachers need a new orientation and polarization, a more motherly attitude, to which this would

help them. From prizes for dooryard improvement, awarded according to comparative rather than absolute standards, it would not be so great a step to prizes for home-kitchen improvement. Why should not domestic teaching be first and chief of all, since most of the activities of most women of the land focus here, and why should not school influence be as much felt and contagious in the home as has been the case with school gardening? The present hygienic interest in school dietaries will never be vital until the school shows how to make kitchen work better. I believe the time is at hand when we shall see a great and new wave of enthusiasm for the kitchen sweep over the country. If signs do not fail, this is likely to involve a change in our very architectural ideas of the home as centering in the hearth. Will not some philanthropist give us plans of ideal homes, with the kitchen made the pleasantest and most attractive room in the house, with an ideal equipment for a laundry next, and with both these quite equal in, if not exceeding in, attractiveness a library or music room, and second in attractiveness at least only to the nursery? House cleaning used to be a great period in old New England, full of new interests, a great developer of the instinct of order and system, a kind of general review of the year. All these and other great topics in this domain need a new and different kind of book presentation in which their material is set forth in a broader, more cultural, historical, and social perspective and be less busy-work, and this would bring out their dignity and their hygienic, moral, educational significance that is now for the most part undreamed of. The girl in the middle teens who cannot sew and make simple things, who would grow dyspeptic or starve if compelled to live on her own cooking, who cannot launder the simple articles of toilet, who knows nothing of caring for children and is not interested in them, is a physiological and social monstrosity which is too frequent in our day and age. Marriage for such girls is prone to end in tragedy for both parties. We have, in view of these specimens of our race, only the new consolation that nature may very likely design a fraction of this, as of our own sex, for single, if not neuter, life, and that if nature decrees it, it is somehow, although we know not how, for the best.

Exasperating as it is to the American feminist to be told that woman's sphere lies in kitchen, clothes, children, and church (the four k's of the German—Küche, Kleider, Kinder, and Kirche), the world is learning again that these are the big four, or cardinal, points of the compass in human life, the foci of chief interest, without any one of which woman's life is a maimed, shriveled, and distorted thing. The world to-day is calling her back to these and anxiously awaiting her response. The *kitchen*, or hearth, means nutrition. Man is what he eats. The struggle for survival is the struggle for food throughout nature. Its production, transportation, marketing, and preparation absorb the life of more than one third of the race to-day. Milk, eggs, meat, vegetables, drinks, adulteration, purity—these are vital points of culture history, the bases of economy, attracting ever more attention from academic chairs as domains of applied science. Next to food comes *clothes*, raiment, which also has its psychology, ethics, hygiene, and history from the skins of cavemen up to the fashion plate magazine. *Children*, in these days of genetic psychology and child study, when the child is seen to be the key to the evolution of man, emanate all the studies of eugenics, sex, population, and heredity, while *religion* is the mother of all science and culture, the first and also the last philosophy. With these the life of woman is bound up, and all that does not contribute to the better practical knowledge of them is of little worth. Back to these should be our slogan. Nothing else can ever really interest woman, call out her best powers, give her the true rights she now demands, or glorify her sex. The future of the race and of civilization is bound up with her education on these lines, and I invoke leaders of her sex to complete its emancipation by achieving the mastery nature intended for her in this sphere. To these themes she can give her heart, mind, and will as to nothing else. Despite all her new industrialism and all her ambitions and advances in art, science, and politics, despite the declining birth rate, the alienation of her interest from domestic life, there is no ground for pessimism, for, unless all signs fail, the tendencies of the best and most insightful women are now back to this abandoned trail, and the near future will see the new dispensation of her education upon these four foundations. Indeed, the psycho-

logical moment seems now at hand when, if a well-selected commission of the right women of means and insight would study, confer, collate, and then bring out a course from about the fourth grade, or earlier, on and up to the bachelor's and even the doctor's degree with these four interests always cardinal, it would be a point of departure for a new, better, and richer training for woman, that without losing anything she has gained in the long thirty years' "war of sex against sex," would bring its fruits to a harvest home of all her rights in a new domestic, social, industrial world in which her sex will everywhere be doing the things it can do best. Such a course should be primarily for the large majority who leave early. Hence, the essentials should be taught as soon as possible on the concentric plan, each grade repeating what had been studied before. It should bring together all the many often timid fractional, tentative endeavors, but begun in different places, should sift, compile, and elementarize with a judicious admixture of intellectual and practical at each state. A study of the prime necessities of life should make poverty more economic and hygienic, and then the course should widen out to accessory cultural elements, going up the grades of the social scale at the same time and finding and opening every practical opportunity at every grade, permeating each with illustrations, concrete cases, visitation, and keeping in touch with the actual life of the community, so that the school should be life itself rather than mere preparation for it. It is easy to indulge in superlatives, but it is probably not extravagant to call something like this the chief need of the civilized world to-day. At least, let him or her who can name a greater one be heard from. Doing must be made a vital organ of knowing, and not, as hitherto, the converse. Wherever possible the girl must know and do practical things and learn the science and theory of it later. Girls of the higher social strata must look and go down to the more elemental simple life of the lowly, and girls from the humbler walks must, as they advance up the grades, see and know more of the comfortable and cultural ways of life.

I append, with some hesitation, a skit I am allowed to reprint from *Appleton's Magazine* (June, 1909, vol. xiii, pp. 677-683), which shows how one representative American citizen was con-

verted from the traditional ignorance and indifference of his sex toward woman's home work to the greatest respect for it. His method of investigation was the only true one, viz., that of scientific experimental pedagogy. It is the true adventure of a man in domestic industry.

A stalwart, young college professor, a friend of mine, lately spent the summer vacation at his home trying to write a book on industrial education for girls, a work not yet published. For exercise, tiring of his wheel, bedroom chest weights and dumb-bells, and stupid, solitary walks, and wishing to use his strength practically, he lately did a week's washing for his family of six under the direction of a laundress, and to her mingled amazement and amusement. He tells me he never learned more in the same time, or faster, and that neither in the gymnasium, tennis court, or on the golf links did he ever get quite such varied hygienic exercise. In the splendid freedom of a collarless, cuffless, unstarched shirt, discarded and unsoilable pants held up by a belt, and in low slippers, nothing more, he went about the day before with a large wash bag gathering sheets, towels, handkerchiefs, skirts, napkins, under- and night clothes from nursery, bath, and bedroom closets, that the preliminary mending might be done. He applied salt and lemon juice to rust stains, an especial acid to ink, and other things in bottles for grass, berry, and other stains, rubbed lard in the greasy places, soft-soaped some of the most dirty spots and things, and put everything to soak in three set, stone tubs in the basement washroom, keeping the white and cleaner things by themselves, and also sawed, split, and laid kindling under the big copper cauldron by the tubs.

Next morning, when the college chimes rang six, he was already at his work, with the enjoyable sensation of bare feet à la Kneipe, and sleeves up to his shoulders. He had ransacked the college library and worried its chief for literature on the subject, only to find that no one had ever put together all that needed to be known on this subject. Therefore he resolved to assign it as a master's thesis to the next girl graduate who consulted him. He suggested it to one only, for she told him plainly that she came to college to get away from such things, and seemed grieved and almost affronted lest it imply he thought her incapable of a loftier career. He told her that one of the best commencement parts he had ever seen was at the well-known Oread cooking school, where a girl in a mortar-board hat, but bare arms, washed one shirt waist and ironed another before an audience, telling them at the same time what she did and how and why. It was all in vain, for to this the young lady replied that she was not seeking a diploma as a washerwoman and would die before she would do such a thing in public, and so would all the rest. So that settled it.

My friend ensconced his laundress in a wicker chair in a cool corner, near by an open window, to direct. They both agreed that Chinamen who sprinkled clothes with water from their mouths were

filthy, and that the steam laundry, which used acids and tore off buttons with machinery, even if it did make things whiter, was not suitable for real Vere de Vere families or for climbers who would be true topnotchers. She had also given him nuggets of information in a rich brogue about soaps, a kind of lecture so meaty that he wished to stop on the spot and note points. From the anatomical laboratory my friend had procured a pair of rubber gloves used in dissections, but soon discarded these. First he gently punched and prodded the soaking mass in the tub with the cleanest white things, soaping and wringing a little till his inspectress was satisfied, and transferring everything into the already bubbling cauldron. In the next tub it was dirtier. To get down to first principles, he had discarded washers and wringers and went to work on the wash-board, an imitation of which has been cleverly smuggled into the list of gymnasium apparatus under the imposing and euphonious classic name of sthenico-dynamo-generator, or chest strengthener. This he found an ideal apparatus for the pectoral muscles and those of the back and shoulders, combining some of the best movements of rowing, parallel bars, and sawing wood. Here, indeed, he felt he had found an athletic bonanza. Wringing in whichever of half a dozen ways always required the principle of opposition of the two forearms and was a distinct improvement upon the hand-wrist-twist-weight-lifter of the gymnasium. The clothes lines of white cotton, which had been taken in weekly and kept in a bag (for the mistress of this house had high ideals of Spotless Town and the City of Hygeia), unlike wires, were incapable of staining, and these were strung on trees over his hedge-protected back yard. Carrying his first tubful, weighing one hundred and thirty-seven pounds, up the steps and some eighty feet, he stretched each out symmetrically, not without soiling a few, however, which had to go back, hanging white garments in the sun and colored ones in the shade, fastening each in place with a basket of wooden pins, learning meanwhile where they could be bought at ten cents for six dozen. Now the trophies of his toil swung like banners in the glorious wind and sun. Thus he persisted, keeping woolen garments in successive waters of a cool and constant temperature to avoid shrinking, boiling the linen and cotton with a tablespoonful of kerosene, a little bluing, and just a pinch of salsoda. After three hours, including a hasty breakfast, or soon after nine o'clock, his work was done, and he had himself photographed, standing before the drapery he had cleansed, proud as a huntsman beside his first bear or a fisherman with his best catch. At 9.30 A.M. he had taken a cold bath, redressed, and was at his desk, with a clear head, an exuberant sense of well-being, and of having done something, and a bit touched with conceit, leaving to his mentor the more unheroic task of bringing in the wash when it was dry.

To be sure, his knuckles were a trifle raw and sore, and athlete though he was, his forequarters were a little tired; but he had tasted

all the gamey flavor of camping out without a hot and dusty journey to get there and back. He almost but not quite resolved that henceforth he would always do the wash and not throw away so wholesome and inspiring an opportunity for physical culture to be enjoyed by paid servants. Now at least no washerwomen's union could boycott him. The servant may have dimly felt his thoughts, for as the task went on she passed from volubility to taciturnity and glumness, possibly fearing that she would suffer from future economy and retrenchment. However, the first act of the drama was successfully ended. I wanted to print the above photograph of my friend as he stood six feet one, weight one ninety-eight plus before and one ninety-seven minus afterwards, deducting his breakfast, which he was methodical enough to weigh. His modesty, however, forbade me. Were he the first woman in the land, he declared, he would have been proud to let it appear. He marveled that there was no young lady, perhaps just from the high or normal school or college, who would not set the world a new fashion, and wondered whether she was too coy and shy of the many celibates in search of a wife who would chortle with joy and fall at her feet. To think of it seriously, why this horror of washing, especially when many society ladies confess to me confidentially that they do and love it in a small way privately. Schuyten found in a comprehensive census just published that less than two and one half per cent of the girl students in the teens had ever wished or planned to devote themselves even to domestic life in general, although seventy-five per cent were proposing teaching or other culture careers—so little does our educational system fit young women for their destiny. How many of them to-day ever did or could do a good washing, or have either the brain, muscle, or endurance for it?

Tuesday, again at 6 A.M., my friend was in the laundry cleaning and firing the stove, and getting out and polishing the flatirons, and preparing three qualities of starch. There was no mangle or roller, and all was by hand. In ironing, however, he had to be shown as well as told by his teacher, for this was skilled labor, and of a very different order. But he was patient and docile and learned to avoid tearing off buttons, ripping open-work, making holes with the point of his tool, scorching, and got a few points about ironing in creases and folds, to tow up well into plaiting, not to rip delicate tissues, how to use different irons in relays, and to tell when each was too hot or cold. At nine o'clock, leaving most of the hardest things to his expert, he arrayed himself in the things he had ironed himself, even a bosom, collar, and cuffs, and was photographed again with his pile of work beside him, which he then distributed to their places. Mending he did not undertake yet. His courage was still triumphant, but the heat, mental and nervous strain had told upon him, and some of his fundamental ideas about woman and her work were a little joggled. He became conscious of a silent sense of superiority on the part of his employee toward

him, and wondered henceforth if it might be harder for her to feel all the respect due to the head of the house. Several burns distracted his attention from his study, although he had learned and applied some valuable recipes new to him which might come handy in other circumstances. His six-year-old girl complained at dinner that the collar of her white dress scratched her neck and was stiff as a board, and the precious pocket in her apron would not open, and noticed that his own collar was a little limp and spotted, which required him to change it later. His thirteen-year-old girl, in the fluffy-ruffles stage, seemed conscious throughout the evening of something wrong about the one garment of hers he had attempted, and his devoted wife never let him know that many of his *chef-d'œuvres* had to be starched and ironed over again, and tactfully answered his inquiries during the week whenever he saw one of his new bits of handiwork in use that all was well, that even the clean napkins did not open too hard, and that it was all the style now to have them so stiff and pasteboardly that they would stay put and almost stand on end.

What puzzled him most of all was how the laundress, who never read a book or an article, and never took a lesson, learned to do all these things, for the effects of never-printed tradition and long practice were hardest of all for this professor of books to appreciate. He ransacked his library in vain to find any trace of the evolutionary history of this art, or to learn the how, when, and where of the precision of the development of the instruments and the skill. How accomplishments like ironing could have developed in the race and been transmitted for countless generations without any of the advantageous aid of print was to him a marvel. Here he feared he must leave a great gap in his book on household arts and education.

Wednesday was cleaning day, and he started off feeling quite himself again. First he took all the rugs from the library to the yard and beat them well and long, learning to stand on the windward side. This, together with rolling and unrolling and carrying them, he found capital exercise, as was taking the furniture out into the hall. Sweeping was too dead easy, but going over the floor on hands and knees with a wet rag set back the shoulders, brought out the chest, strengthened the cucullares, complexus, biventer, and erectores spinæ, and many other muscles. Almost nothing woman does or can do, he declared, could be quite so hygienic, although going over every part of a chair with a dust rag requires so many positions that it is a close second to floor scrubbing in hygienic value. Dusting the mantel and bric-à-brac and handling all the books was careful, puttering work, and in doing this he had several lessons as he broke things on the delicacy and deftness of manipulation required, and learned a lesson in charity to servants who have accidents with ornaments. He also learned much of sequences as well as of patience, and even to marvel at the acuteness of

perception of his wife, now his perverser, as she detected spots of dust which he had left in the openest spaces as well as in crevices. Furniture and picture frames, he declared, should always be plain, with no groovings or flutings; every floor corner should be beveled; there was no use in having so many useless things about merely for ornament; windows should never be opened to let in dust, and decorated china and everything repoussé and in relief should be eschewed, and books kept behind glass cases, with rubber-fringed, dust-tight doors, with flaps at every keyhole. When he asked his wife to mark the grade of his excellence in this morning's work, she gravely said that there were three demerits for breakages, that he deserved about forty-five for dusting, seventy-five for wet-ragging the floor, pointing out his defects, and one hundred plus for rug-beating and handling. This ended the third lesson, with many new types of physical culture of both fundamental and accessory muscles, and new knowledge and viewpoint of women's works and ways, which he had seen from the outside before but never till now felt or appreciated. He wondered if he ought not to advocate in his book that all intending husbands should be required by law to take the course he was now giving himself before they embarked on the sea of matrimony, a consideration that probably will be amplified in his volume in a way that, I think, will command the thoughtful attention of housewives who may read it. He fancied that marital ties would be cemented if the lords of creation had acquired such intelligent sympathy and appreciation of their wife's responsibilities as this experience would insure.

After these experiences my friend felt an inspiration to take a vacation the rest of the week, and the next week his wife and children spent with her parents, leaving him alone with the servants. Monday morning he resolved to give a stag dinner to eleven of his friends, to some of whom he had long felt under obligations. He also wished to feel that he could do it alone *à la regle*. So, after a careful inspection of pantry, ice box, and cellar, to note the supply already on hand, and having timidly broached his purpose to the cook, he started; and after having studied from several cook books what courses he wanted, he sallied forth to the market. Clams on the half shell with lemons and ice were easily provided for; and so was soup with vermicelli and rice, a favorite of his. For fish, he wished his guests to have each a good brook trout, but found it closed season, with a stringent law well on. But the fishmonger told him confidentially that he knew a way to provide them at about twice the usual cost, and so he culpably compounded with crime and ordered them. A crown roast of lamb with peas gave little trouble; but, in providing the ice, which in his judgment must have rum, he realized that he lived in a no-license town. But here again the grocer knew a way, and again he became a silent partner in crime. He had set his heart on partridges, at least half a one for each guest; but this the game laws seemed to make

improbable, and he could only leave an order to provide them if practicable, otherwise to fall back upon squabs or snipe with mushrooms. Thus he became thrice a potential criminal. The ice cream must be made at home and cast in individual molds, and these he had to find to his taste and buy. Nuts, Porto Rico coffee, sweets, ginger, Apollinaris, and other minor items were provided, and wines he fortunately had. And so he went home, with some complacency, after several hours of nerve-racking and mentally fatiguing work.

But now his real trouble began. The cook absolutely balked, and declared she could never prepare all these dishes without the superintendence of the mistress, and that the homemade ice cream in individual molds was impossible. He thought, too, that he detected in her mind lack of confidence in her ability to prepare the trout as he wanted it, and she declared that if she undertook the entire task she must have three dollars extra and a helper. Being unwilling to apply to his neighbors for the loan of a cook, he set out for an intelligence office and learned of an expert, whom he at length found in a remote part of the city, who would bestow her efforts for the day for five dollars, but must be supreme. To this his own cook at first flew into a downright revolt, and responded by threatening to bolt at once, bag and baggage. But by promising her an extra three dollars, she consented, though with no very good grace, to the conditions. The chambermaid agreed to serve at the table, as she had often done, but let it be plainly seen that she, too, expected to do so for a consideration. He wished another table girl in the same kind of black dress, with white cap and shoulder-strap apron, and she suggested that a friend of hers would be willing to come in for the evening for a proper fee, although she had no uniform. She was found, taken to an establishment, duly fitted out for eleven dollars and a half, and at 7 P.M. my friend sat down to his solitary meal, excited in mind and body, a real case of nerves which perturbed his sleep with painful dreams.

Happily, he little realized what was before him the next day, on which I perhaps ought to draw the veil. So I will not enumerate the things found lacking or the orders which came late, or not at all, so that sudden shifts had to be made, how his colored man and he were subjugated the entire day and kept running by the cook. Nor will I describe the friction between the special and the stated help; the discovery, when the table came to be laid, that several plates and glasses in the sets required were one or more pieces short, and the further shifts, trips townward, and purchases thereby made necessary; how, when he came to don his tuxedo, no clean, broad-bosomed shirt was found save one he had ironed, and which it made his very soul groan to wear; how both the trout and squabs, for some mysterious reason, proved one short, so that he had to decline both rather than let one guest go unserved in these courses; how very promptly each invited guest arrived; how long

the initial wait before dinner was announced, or how long the delays between several of the courses; how anxious he was throughout, in contrast to the ease and confidence he had felt when giving dinners in which his wife had borne all the burdens he was now bearing and given no sign; how light of heart he grew when the coffee and cigars were served, and especially when a familiar guest praised the perfection of an establishment that could give such a dinner; how tempted he was to reveal the fact that he had done it all and that his wife was not only not in the kitchen at all, but one hundred miles away, and in blissful ignorance of his treacherous invasion into her domain. Nor will I describe his feelings when later he added up the cost of his little dinner per plate and compared it with what he might have offered approximately the same for at the club. But it was all his own, his very own. And it would be easier next time, only this time was quite enough for him for the present. But this adventure in domesticity he felt sure would outrank all the others in its bitter-sweet memories when it came to the *olim meminisse juvabit*, which was kept fresh in his mind during the subsequent days, when his own lonely meals were made up of or interlarded with the remains of his sybaritic feast.

Cooking to him had come to seem the art of arts. Ever since Prometheus gave men the control of fire they have been evolving this "preliminary digestion," every advance in which sets free more kinetic energy for culture and civilization. Good cooking, too, is the only cure for intemperance, and bad cooking its only cause, he holds. He had studied the chemistry of foods a little and experimented a little with Fletcherism and the opposite theory, that food should be bolted, was a little heretical about the advantages of regular meal times, and inclined to the view that eating only when one was hungry and what one most wanted was best for the system. He tried to teach his children geography a little by telling them where each item on their table came from, how it grew, was prepared for the market, etc. He told them, for instance, of the habits of salmon, mackerel, swordfish, and the rest, of Africa and the Eastern Islands where spices grew, of slaughterhouses, canning meats and vegetables, while grains of all kinds, fruits of all seasons, birds, every edible variety of meats, even wines and beers and all the rest, were texts of informal talks which he had carefully prepared for years that the children's appetites might be made apprehension centers for all the botanical and zoological knowledge, accounts of processes and localities, that they could be made to contain. To this rather unique organization of his knowledge he was slowly adding a limited curriculum of cooking, and on this theme had accumulated several shelvesful of books and choice recipes in clippings. As in the refectories of the old monasteries and mediæval universities a cleric read scripture, litany, hymn, or prayer from the liturgy to students at their meals, so my friend discussed, at least at their dinner, one or more edibles, and found that from

confectionery to common household medicines, stomach and palate were great quickeners of the intelligence and were unique fructifiers of many-sided interests. His kitchen garden and flower beds at his summer home had long been among the best in the vicinity, and he spent hours with farmer, gardener, and children, working and telling, and insisted on the latter's right to spend as much time as they wished in the kitchen itself, which he deemed the best possible laboratory for them.

Plain cooking he knew something of, and Thursday and Sunday afternoons, when the cook was out, he with his wife and children prepared the evening meal and kept alive the old traditionary feeling of the hearth as the heart of the home. But there were many mysteries of this high art he could never master. Practice and study as he would, his wife excelled him here as much as he did the children, or as the cook excelled her. He had repeatedly invited fellow campers to a meal of his own preparation, but palatable as his best stunts were, they were few and too little elaborated for any appetite or places save those of the wood and shore. Such game and fish as he had taken himself, and chickens, were his strong points. On the paternal farm, as a youth, he had learned to do many things, and as a student in the laboratory in Germany he had taken courses of lessons each of a shoemaker, plumber, glass-blower, broom maker, bookbinder, and he set type and carved wood a little. But with all his unique and chronic passion for learning to do new things, nowhere did he make closer acquaintance with more of his own limitations than in this domain, although he had for years been a culinary endeavorer. Fancy cooking and the ambition to cater to the loftier heights of gastronomic art, like the great chefs some of whom have attained fame through two continents, was not in his mind; but never so much, perhaps, as when he was invited to partake of meals prepared and served by students in cooking schools and departments, for which he had a strong *penchant*, did he so long to "point to higher worlds and lead the way" as in this department of household art. He vowed that it was his wife's skill in this field that first won his heart, and that organ should always be captured thus through the stomach; that man is an animal that, like other beasts, best loves his best feeder. In season and out of season he was prone to ask even his hostesses at their own table what they could and did cook themselves; and so strong was his habit that, had he not been naturally so ingratiating and intrinsically popular, he would have made himself generally disliked. He often did thus give offense, though his queries were generally regarded as fads or eccentricities of genius, and met with laughter and jests rather than with answers.

Of about everything that the chambermaid, butler, and coachman knew he was already past master, but house cleaning was his pet foible. In this avocation, for some two months every spring, he found just the physical exercise and mental diversion that seemed

most of all helpful for both mind and body. Two or three hours a day sufficed. Beginning in his own study and arrayed in suitable attire, with every window open, each book was carefully dusted, two or three at a time, out of the window, and, shelf by shelf, the books of each tier were removed, dusted, returned, and as each section was finished covered with a sheet well tucked in. Windows were washed, curtains taken down for cleansing and repair, every picture overhauled and rehung. Incidentally, too, every book, pamphlet, paper, lecture, book note, letter file, drawer and its content were overhauled and arranged in order, sometimes according to a new scheme. Wheelbarrow loads of literature were discarded and taken to the library or the cremation furnace in it, or to the second-hand bookstore, to make room in advance for the accumulations of the following year. All this process meant also that everything was mentally inventoried, lost treasures found and relocated in their proper place, stray and scattered leaflets, manuscripts, letters, clippings were sorted, fastened together, pigeonholed in the desk, like brought to like, to the great saving of time and energy throughout the year. This work no other could possibly accomplish, however carefully directed, without adding to the confusion. New and important arrangements here where most of his working hours were spent gave also a unique and most exquisite pleasure, perhaps because it placed him in masterful command of all the resources in this plethoric room, full of the accumulations of years. Standing desk, low table, lounge, reclining chair, drop light, smoking stand and all its accouterments, rotary bookcase, cases of drawers for cards and for filing large envelopes, writing and reading chairs—everything was rearranged, and many petty labor-saving devices and conveniences gave a glow of happiness of a hitherto psychologically unclassified kind. What was it? At any rate, all this brought him nearer to his work, made him more completely master of all his resources, and restored actual touch with many things that were lapsing from his cognizance, gave a clear and fresh feeling of increased efficiency, and made old things seem new. It was somewhat as if his very brain was undergoing reorganization and resanification. His thinking could now be more systematic and effective, and his whole intellectual nature felt tidied up, cleansed, and refreshed.

Our ancestors, the cave dwellers, apparently never cleaned house, but let the debris of broken flint, implements, worn-out mortars and pestles, and even garments, to say nothing of bones, shells, and ashes, accumulate, living on top of it all for generations, and when the cave was full, moving to another. I know old houses in which the inmates inherit a similar propensity, and are unable to dispose of disused, and even broken, worn-out articles. Old papers, clothes, shoes, hats, letters, books, furniture are carefully preserved, perhaps relegated to attic, lumber room, or closet, until all are bursting. "Anything may come handy," and so it is carefully laid up

and forgotten. Woe betide him or her who lays destructive hands upon it! Households have been disrupted by this conservative instinct clashing with that to clean up. One estimable housewife I know fell into hysterics because in her absence an old chest full of rags, samples, remnants, envelopes, clippings was sorted over and the worthless part burned on the dump by a husband who needed the chest, although she had not opened it for fourteen years. For a year after everything she could not readily find she was sure had been destroyed in the great holocaust. House cleaning should be an imaginary moving, and, painful as it often is to condemn old things hallowed by associations, to have once been strenuous in this matter often gives "a peace that passeth understanding," and which is probably somehow akin to the elimination of waste tissue by the agency of a too long neglected bath. To keep lengthening rows of old shoes, rubbers, trousers, coats, dresses for years in the vague hope of needing them for some outing, or until just the right person to use them comes to the door, is a form of psychic slouchiness akin to letting the tailings of a mine block its entrance. Heirlooms and special keepsakes are different. Yet the moral of nature's lesson is iconoclastic. Man needs to molt most such things in order that his soul may grow, attain adequate detachment from the past, and live more palpitatingly in the present. Nations with the longest and most elaborately recorded history, like modern Italy and Greece, are not better for that fact, if, indeed, they are not impaired by the burden of their memories. This may help some at least to explain my friend's passion, amounting almost to a mania, for house cleaning. Perhaps, when he is older, he will feel differently. But he lately declared that for nearly though not quite every old book, the substance of which he knew tolerably well, that he expropriated or destroyed, he felt an access of power to master the next new one upon the subject. Every old letter file, with, to be sure, some exceptions, that he consigned to the wastebasket gave new exhilaration, because of the feeling that he would never have to look these over and decide their fate again, as he had so often done annually, but could now devote the time and energy to better uses. The distribution of unmendable furniture relieved his mind of the faint but year-long prompting to get it repaired, for such a feeling of duty to invalidated articles may become almost an obsession, and perhaps weaken the character, as good intentions too faint to ever prompt action are said to do. For years he had kept a long shelf for unbound continental books, part of which was lost, in the hope that some time the missing forms would appear; but having mustered courage to assign the lot to the furnace, his very heart bounded with self-gratulation, a very little as the burden of sin is said to fall off the back of the penitent.

Thus he or she who does not sometimes clean house with his or her own hands, does not and cannot feel the full sense of ownership and possession of treasures. To be really loved they must be touched,

handled, moved, furbished, and the more work lavished upon them the more they are not only sensed, but loved and treasured. Thus the rich do not own their "things"; they are simply stored with them and are ownerless. It is like the case of mothers who have borne but never nursed, fed, dressed, or otherwise tended their children, so that the latter are really orphaned, though living in plenty. It is moral slouchiness about psychic housekeeping akin to senescence, which is caused by the accumulation and nonelimination of the waste products of decomposition that lets useless things accumulate unduly, while, conversely, the drastic exercise of the spring function brings rejuvenation of spirits and makes and keeps us like young people who have not yet lived long enough to accumulate burdensome impedimenta.

I have not begun to do justice to my friend's practice or to his theories. If I rightly catch his drift, he is penetrated with the conviction that woman is in danger of losing respect for and interest in some of her own most fundamental functions, and he desired to see at first hand if these were all so loathsome. He finds most of them exhilarating and peculiarly hygienic. He is not conceited enough to think that his solitary example—and solitary enough it is—or his precept when his book appears will set her again upon her lost trail. He fears she is abandoning her glorious kingdom, and that so set is her determination to follow man that she will return to her own only if he leads the way. He is able to find, experienced as he is in athletics and in varied industries and handicrafts, nothing quite so wholesome for body and soul as doing precisely what woman is now turning her back upon. He holds, too, that no housewife can possibly have washing, cooking, cleaning, etc., well done by servants who has not learned how and actually done these things well herself, whether she be a millionaire or a professionally married woman, helping her husband outside the home to support his family. He would find and make in domesticity new centers for the education of girls and women, and holds that it would not be less, but more purely cultural than present methods. But, as a lady professor in his own college remarked, "though he is a good fellow, he is a queer Dick, and the bats that have domesticated themselves in his belfry seem to be a new species, though they are probably harmless."

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